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THE UNIVERSITY OF ALBERTA

AN INVESTIGATION INTO METHODS AND PROCEDURES IN THE TEACHING OF HISTORY IN THE LARGER SECONDARY SCHOOLS OF ALBERTA

A DISSERTATION SUBMITTED

TO THE COMMITTEE ON GRADUATE STUDIES

IN CANDIDACY FOR THE DEGREE OF

MASTER OF ARTS

DEPARTMENT OF PHILOSOPHY

BY GEORGE MURRAY DUNLOP

EDMONTON. ALBERTA
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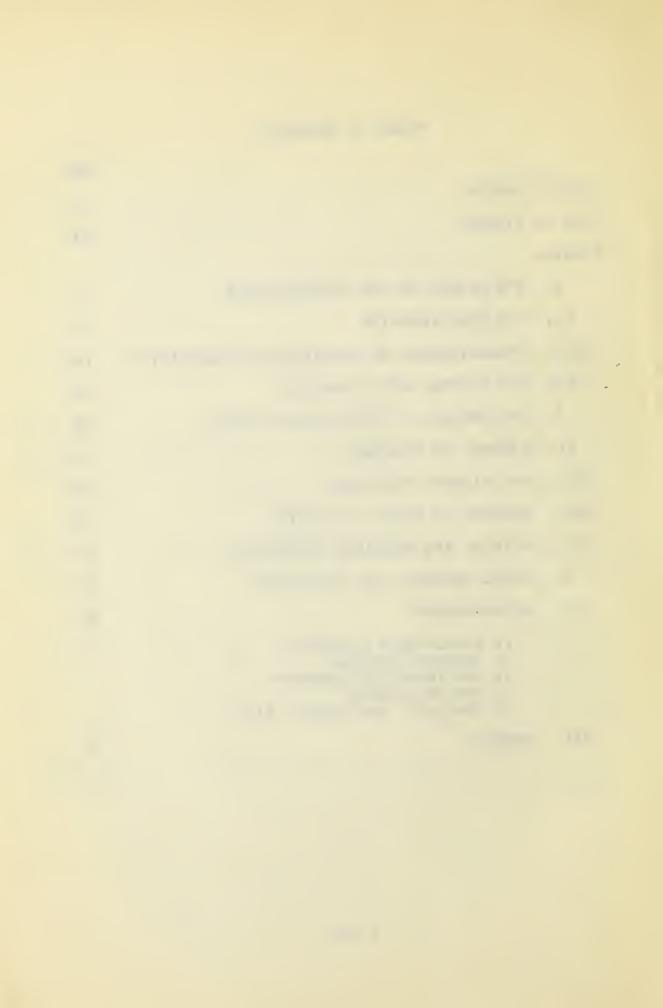
Mr. E. E. Hyde, M.A., Mr. D. R. Innes, B.A.

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TABLE OF CONTENTS

		Page
LIST OF	TABLES	٧.
LIST OF	FIGURES	vi.
Chapter		
I.	THE NATURE OF THE INVESTIGATION	1
II.	THE QUESTIONNAIRE	6
III.	ESTABLISHMENT OF VALIDITY AND RELIABILITY	12
IV.	THE CONTROL GROUP SUMMARY	25
٧.	THE GENERAL OR INTRODUCTORY GROUP	42
VI.	METHODS OF TEACHING	4.6
VII.	THE HISTORY NOTE BOOK	54
VIII.	METHODS OF STUDY AND REVIEW	60
IX.	WRITTEN AND GRAPHICAL EXERCISES	67
x.	TEXT, READINGS AND REFERENCES	76
xI.	MISCELLANEOUS	82
	 Examination Technique Student Activity Individual Differences Current Events Teachers' and Pupils' Aids 	
XII.	SUMMARY	93



LIST OF TABLES

Table		Page
I.	Affectivity Distribution of the Control Group	15
11.	Affectivity Factor in Group Finding History Enjoyable	16
III.	Affectivity Factor in Group Finding Little Enjoyment	17
IV.	Distribution of Students in Control Groups	18
٧.	Control Group Summary Demonstrating Accuracy of Students' Answers	19
WI.	Control Group Summary Illustrating Lack of Reliability of Students' Answers	20
VII.	Evidence of Underestimation of their own Abilities by Control Group Teachers	21
VIII.	Unreliability Detected by the Range of Variation of Answers	22
ıx.	Reliability Proven by Range of Variation Method	23
x.	Testing of Reliability by Repetition of Twenty-eight Items	24
XI.	Classification of Items of Questionnaire	39
XII.	Unreliable Items which are Worthy of Retention	40
XIII.	Number of Historical Essays Written during the Year	67
XIV.	Number of References Read in Addition to Text	80



LIST OF FIGURES

Figure		Page
1.	Students' Emotional Reaction to History	44
2.	Percentage of Teaching Time in the Average History Period	46
3.	Percentage of Average History Period Used for Text Book Study	47
4.	Percentage of Time of Average History Period Used for Class Discussion	47
5.	Percentage of Average History Period Used for Preliminary Review	48
6.	Percentage of Average History Period Used for Concluding Review	4.8
7.	Use of Blackboard Outline by Teacher	50
8.	Teaching of Complete Topic in Each Period	52
9.	Extent to which History Note Books were Prepared	54
10.	Percentage of the Year's Work in History Included in Note Book	55
11.	Percentage of Note Book Dictated by the Teacher	56
12.	Percentage of Note Book Written on Board by Teacher	56
13.	Percentage of Note Book Entirely of Student Construction	57
14.	Regularity of Study of History by Students	60
15.	Was "Cramming" Resorted to by Students?	61
16.	Length of Review Before the Final Examina- tion	65
17.	Number of Short Written Exercises Given per Month	69
18.	Students Receiving Study Assignments Regularly Before Class	70



LIST OF FIGURES (Continued.)

Figure	Page
19. Students who Performed Study Assi Given Before Class	gnments 70
20. Number of Historical Maps Complet Student During Year	ed by each 71
21. Time Required to Complete Map	72
22. Construction of Charts by Student	8 74
23. Construction of Diagrams by Stude	nts 74
24. Construction of Graphs by Student	s 74
25. Restriction of Material Presented Found in Text	to that 77
26. Presentation of Materials Secured Sources than Text	from other 77
27. Number of Examinations in History School Year	During 82
28. Oral Reports by Students	94
29. Encouragement of Class Discussion	85
30. Teachers' Attitude to Olever and Students	Poorer 87
31. Number of Current Events Periodic able in School	als Avail- 90

CHAPTER I

THE NATURE OF THE INVESTIGATION

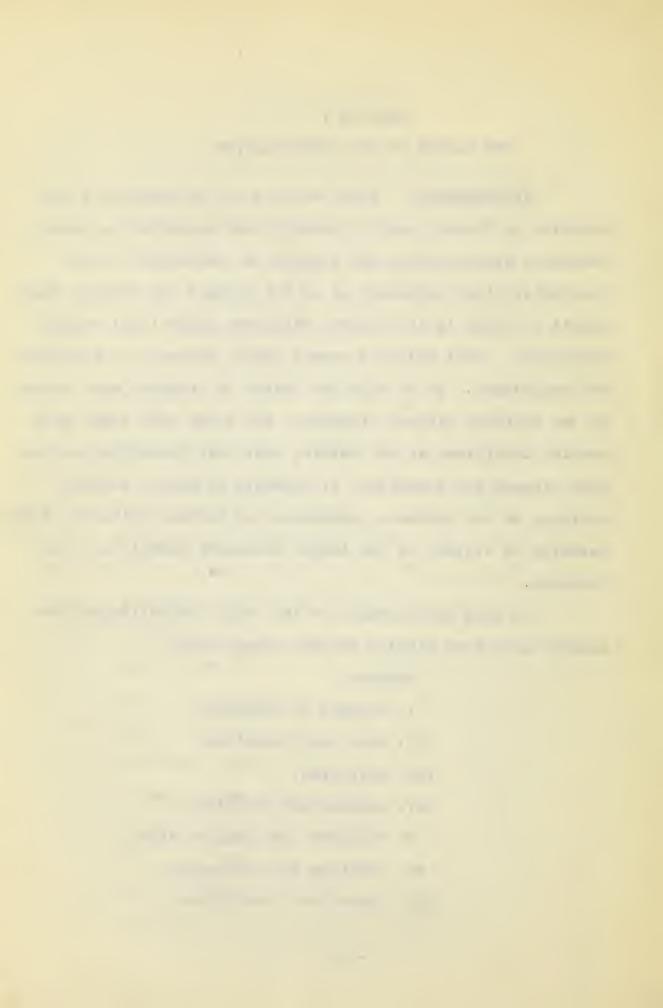
Introductory. Ideal methods and procedures in the teaching of History have frequently been described in detail.

Teachers, psychologists and students of education are in reasonably close agreement as to the methods and devices which should be found in the History classroom under ideal working conditions. What actually occurs there, however, is a matter for conjecture. It is with the desire to discover what occurs in the ordinary History classroom, day after day, under such working conditions as may obtain, that this investigation has been planned and executed. It attempts to make a careful analysis of the methods, procedures and devices utilized in the teaching of History in the larger secondary schools of this Province.

To give definiteness to the study the following procedures have been singled out for examination:

General .

- I. Methods of Teaching.
- II. Note Book Technique.
- III. Reviewing.
 - IV. Examination Technique.
 - V. Teachers' and Pupils' Aids.
 - VI. Readings and References.
- VII. Essays and Assignments.



VIII. Maps and Graphical Exercises.

IX. Methods of Study.

X. Student Activity.

XI. Text Books and Their Use.

XII. Individual Differences.

XIII. Current Events.

The Instrument of Investigation. The method of investigation adopted was the questionnaire. Great care was exercised in its construction. It has been divided into the fourteen divisions mentioned above, and totals eighty-seven items.

Subjects. The subjects utilized in the securing of data were the recent graduates of the larger secondary schools of the Province who were in attendance at the three Provincial Normal Schools in Edmonton, Calgary and Camrose during the session of 1930-31. To limit the field of the study, only those who had attended schools where six or more teachers were engaged exclusively in high school work were allowed to answer the questionnaire. To make the investigation a study of conditions as they exist in Alberta, graduates of Alberta schools only were permitted to give their evidence. The students who answered the questionnaire were all recent graduates of high schools, having taken their Grade XI work within the last five years.

Due to these necessary restrictions, the total number of students who furnished the data for this investigation was reduced to three hundred and twenty-nine.

The Field Covered. The next problem encountered was that of making a selection of one unit of History for study. It was felt that a bulking of observations based on the teaching received in Grades IX, X, XI and XII would result in confusion. Therefore, the investigation was limited to the methods, procedures and devices used in the teaching of History 5, the unit of History taken in Grade XI. This has added to the effectiveness of the study, as it has permitted a much more scientific and objective comparison of methods than would have been possible had the students based their answers on their experience in the entire four units of History usually taken in high school.

The Construction of the Questionnaire. The actual drafting of the questionnaire received the most careful attention. Realizing that on the clearness and objectivity of the items would depend its utility, exacting and searching criticism and revision, by competent judges, were secured. The initial draft was criticized by two inspectors of schools, several teachers of History in secondary schools, and a number of students of the Edmonton Normal School. The second draft was criticized by Mr. D. A. McKerricher and Mr. G. Manning, Instructors in History at the Calgary and Camrose Normal Schools respectively. It was also sent to twelve of the most outstanding instructors in History in various secondary schools of Calgary and Edmonton. Finally it was answered by a group of Normal students in order to test their reaction to the various items.

As a result of the exceedingly thorough criticisms and helpful suggestions received from the above sources, a final draft of the questionnaire was prepared. After such painstaking criticism it was hoped that the finished product was free from ambiguous items, definite, and as objective as careful preparation could make it. The final draft was then mimeographed and sent to the various Normal Schools for completion by the students who were eligible to answer it.

Administration of the Questionnaire. The questionnaire was given to the students of the three Normal Schools
by the instructor in History in each institution. Carefully
worded instructions as to the best procedure in answering it
were given. The students were informed that, since they were
not to sign the questionnaire, their answers would not constitute criticisms of their former instructors. Thus it was hoped
that loyalty to the schools which they had attended would not
bias their judgment and thus diminish the value of their
evidence.

The students who made up the various control groups were required to sign their names, but they had already been assured that, in every case, the permission of their former teachers had been secured.

The ordinary cautions, as to the exact method of recording their opinions and evidence, were given. In addition, they were especially urged to enter into the task of answering as sincerely and honestly as possible. The writer administered



the questionnaire in the Edmonton Normal School, and can testify to the attitude of the students there. They reacted to the whole project favorably, and co-operated as satisfactorily as could be desired.



CHAPTER II

THE QUESTIONNAIRE

The Final Draft of the Questionnaire. The questionnaire follows in the form in which it was finally submitted to
the students. It may appear unduly long, an aspect which is
easily excused when one considers that it was anticipated
that many of the original eighty-seven items would have to be
discarded. This proved to be the case. Ten items were later
rejected as wholly unreliable, while others, whose reliability
or validity was questioned, were left in to add interest or to
illustrate an argument. Wherever this occurs the unreliability
of the results has been indicated.

The Totalled Results. - In order to economize in space the totalled results of the answers of the questionnaire have been inserted. Where items had been proven unreliable, or where they had not been utilized in the discussion of results, the totals have been omitted.

QUESTIONNAIRE IN

METHODS IN TEACHING HISTORY IN

SECONDARY SCHOOLS

- Please supply answers to the items given below by underlining or furnishing estimates as indicated. Strive to be as accurate as possible. When in doubt as to the method of answering, consult your Instructor.
- N.B. All answers must refer to your experience when taking the Grade XI unit of History in Alberta History 3.

 Observations or answers based upon your experience in Grades IX, X and XII will injure the value of the Questionnaire.



General .

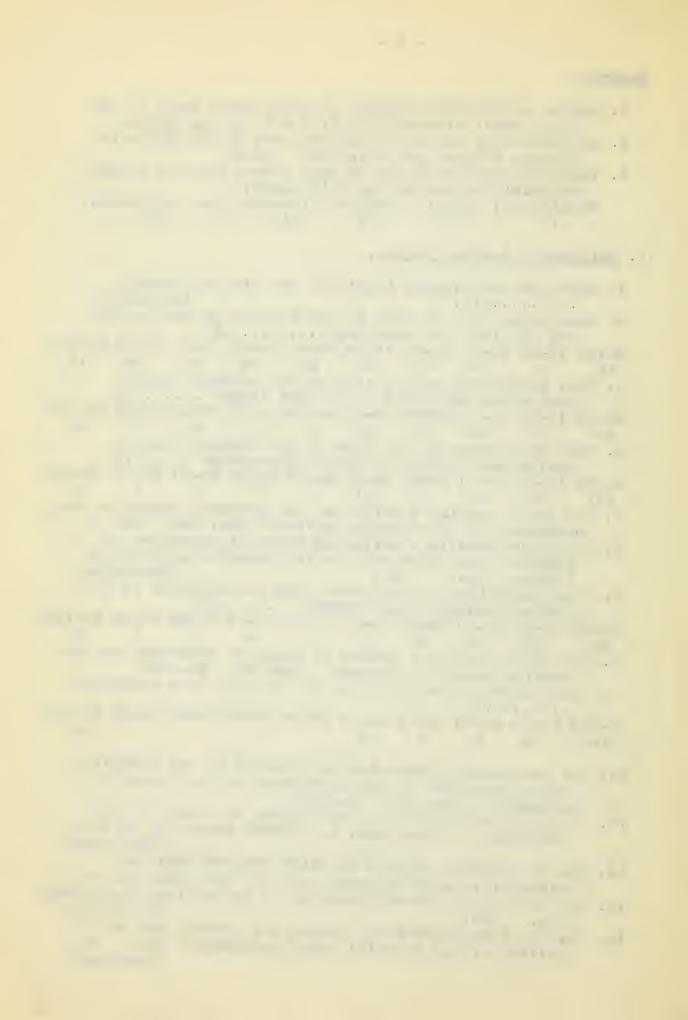
- 1. Number of teachers engaged in High School work in the High School attended: 1; 2; 3 5; 6 or more.
- 2. Approximately how many students were in the class in History 3 which you attended? 39.33
- 5. Indicate your enjoyment of your year's work in History as fairly as you can on this scale:

 Neclicible: Slight: Average: Pleasant: Noct enjoyable.

Negligible: Slight: Average: Pleasant: Most enjoyable.
7 32 114 115 36

I. Methods of Teaching Group.

- 1. What was the average length of the History period?
 min. (Discarded)
- 0-10% 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100 15 8 14 51 66 45 28 42 23 17
- 3. What percentage of the time of the average History period was devoted to Text Book study?%
- 0-10% 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100 159 27 24 31 20 4 5 8 3 3
- 4. What percentage of the time of the average History
- period was devoted to class discussion?% 0-10% 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100
- 116 68 54 32 17 7 2 1 1 2
- 5. Was there usually a review of the previous lesson at the beginning of the teaching period? Yes. 250 No. 60
- 6. Was there usually a review of material presented in lessons other than that in the immediately previous lesson? Yes. No. (Discarded)
- 7. What percentage of the class time was utilized in the review preceding the lesson?%
- 0-10% 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100 209 52 25 8 1 2 0 1 1 0
- 8. Was there usually a review by means of questions at the conclusion of the lesson? Yes. 94 No. 204
- 9. What percentage of the time was usually thus occupied?
- 0-10% 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100 195 15 9 1 2
- 10. Did the teacher place a brief outline of the material being presented on the blackboard as the lesson progressed? Yes. 211 No. 106
- 11. Did the teacher usually teach from, or refer to when teaching 1. The Text. 2. Lecture notes. 3. No aid. (Discarded)
- 12. Did the teacher cover a definite topic or unit of material in each teaching period? Yes. 213 No. 91
- 13. Did the teacher merely progress as far as time permitted?
 Yes. No. (Discarded)
- 14. Was the blackboard used, during the lesson, for an outline of the material being presented? Yes. No. (Discarded)



II. Note Book Technique Group.

- 1. Were note books in History compiled during the year?
 Yes. 298 No. 13
- 2. What percentage of the History for the year did they cover? Underline the nearest percentage. 20%; 40%; 60%; 80%; 100%.
 0%-5. 20%-4. 40%-6. 60%-24. 80%-123. 100%-145.

5. Were they mainly of student construction? Yes.122 No.169

- 4. Were they mainly constructed by the teacher, and conveyed to the students either by dictation or writing on the board? Yes. 173 No. 114
- 5. Approximately what percentage of the note book was dictated by the teacher? 20%; 40%; 60%; 80%; 100%. 0%-56. 20%-64. 40%-25. 60%-31. 80%-89. 100%-52.
- 6. Approximately what percentage of the note book was written on the board by the teacher? 20%; 40%; 60%; 80%; 100%.
 0%-78. 20%-111. 40%-21. 60%-28. 80%-27. 100%-14
- 7. Were they co-operatively prepared, the teacher furnishing the main headings, and the students filling them in? Yes. 93 No. 214
- 8. Approximately what percentage of the note book was entirely of student construction? 20%; 40%; 60%; 80%; 100%.
 0%-55. 20%-89. 40%-36. 60%-21. 80%-51. 100%-35
- 9. How frequently were the note books checked by the teacher during the year?times.

0 1 2 3 4 5 6 more 31 100 63 24 31 14 4 26

- 10. Did the checking result in improvement of the note book? Yes. 171 No. 74
- 11. Were the note books of value for review before examinations? Yes. 297 No. 12
- 12. Were the notes in the form of main headings followed by tabulations of subordinate headings and details?
 Yes. 240 No. 64
- 13. Were the notes in essay form? Yes. 117 No. 188
- 14. Were the students encouraged to make notes while the lesson was being taught? Yes. No. (Censored)
- 15. Were the notes prepared after all instruction and discussion was completed? Yes. No. (Censored)

III. Review Group.

- 1. Were classes which consisted exclusively of review held at regular intervals? Yes. 178 No. 117
- 2. Were the review questions asked in class answerable by a single isolated fact or idea? Yes. 77 No. 216
- 5. Did they require a reasoned answer or chain of argument? Yes. 226 No. 76
- 4. Did the review questions demanding the recall of facts deal usually with the more essential or important facts? Yes. 265 No. 27



- 5. Were they more frequently on trivial or unimportant facts? Yes. 18 No. 219
- 6. Did the teaching continue up to the final examination? Yes. 67 No. 223
- 7. If a review period before the final examination was left, how long was it? (Express answer in weeks.)weeks.

1 wk. 2 3 4 5 6 7 8 more 51 40 63 58 23 48 9 12 6

8. Did your teacher review by asking you questions taken from old examination papers? Yes. 275 No. 34

IV. Examination Technique Group.

- 1. How many tests or examinations were held during the entire year, omitting the final examination? 1-3. 134; 4-6. 86; 7-10. 28; more. 56
- 2. Were these examinations usually of the essay type?
 (Requiring answers in essay or composition form.)
 Yes. 273 No. 32
- 5. Did they contain any Objective Type questions? (Questions answerable by underlining Right Wrong, Yes No, choosing right answers.) Yes. 31 No. 276
- 4. Did your teacher use both methods? Yes. No. (Discarded)
- 5. Estimate your average term mark in examinations in History for the year, based on the mark given you by your teacher. % (Information not used in this study.)
- 6. What was your mark on the final examination in History? (Information not used in this study.)

V. Teachers' and Pupils' Aids Group.

- 1. Were teachers' aids or pupils' helps (printed handbooks constituting a synopsis of the year's work in History) used by the teacher? Yes. No. (Discarded)
- 2. Were they placed in the hands of, or purchased by the students? Yes. 19 No. 289

VI. Reading and Reference Group.

- 1. Was your reading for the year's work in History confined to your text? Yes. 243 No. 65
- 3. How many reference books for additional reading were available in your school? (Discarded)
- 4. Did you read your text carefully during the year? Yes. 212 No. 84

VII. Essays and Written Work Group.

- 1. How many Historical essays equivalent in length to four foolscap pages did you write during the year?

 O 1 2 3 4 5 6 7 8 more
 185 20 40 13 14 5 4 1 0 5
- 2. Were short exercises the chief written work in History? Yes. 241 No. 67
- 5. Approximately how many of these were required per month?

0 1 2 3 4 5 6 7 8 more 87 47 48 26 24 9 4 3 0 45

- 4. Was there usually a written assignment required in preparation for each lesson? Yes. No. (Discarded)
- 5. Was there usually a study or reading assignment required in preparation for each lesson? Yes. 245
 No. 64
- 6. In case there was such a study or reading assignment, did you usually perform it? Yes. 194 No. 89.
- 7. Was the student required to write reviews or summaries of each lesson? Yes. 70 No. 233

VIII. Maps and Graphical Exercises Group. (If you fail to understand any item in this group, leave it blank.)

1. Give approximately the number of maps you were required to complete during your year's work in History.

0 1 2 3 4 5 6-8 more 74 19 53 49 42 31 30 3

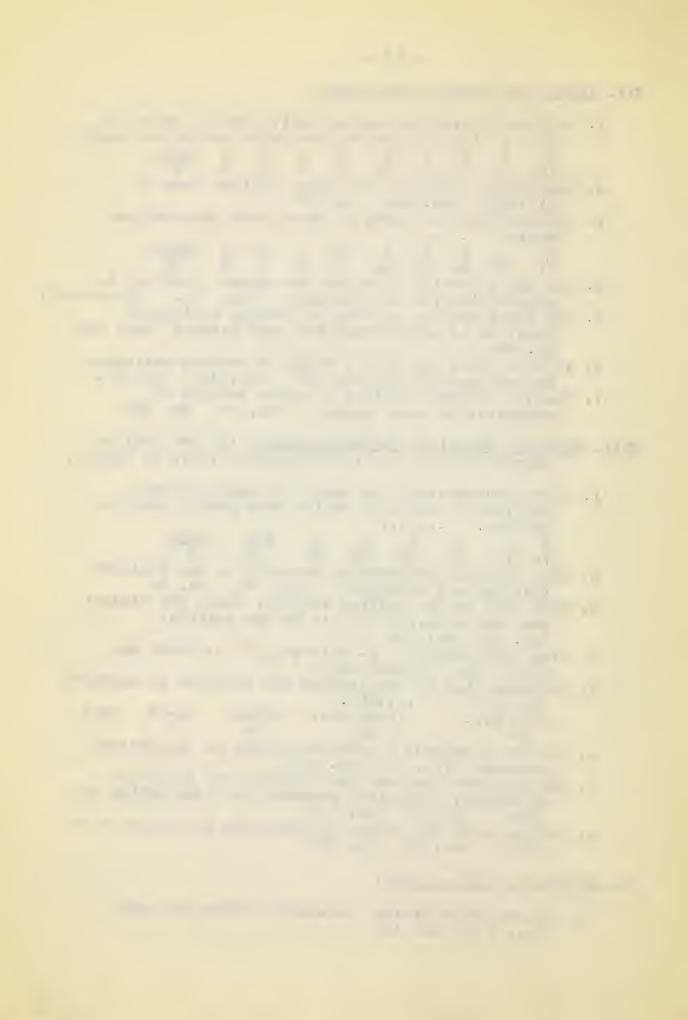
- 2. Were the maps constructed entirely by the student? (Outline and details.) Yes. 201 No. 64
- 3. Were they of the outline variety, where the student was only required to fill in the details?
 Yes. 49 No. 187
- 4. Were they usually: 1. Colored. 17 2. Black and White. 226 (Underline).
- 5. How much time on the average was required to complete one map?min.
 1-15 min. 15-30 min. 30-45 45-60 over

94 81 15 7 0 6. Did you construct a chart or charts of the History

- 6. Did you construct a chart or charts of the History covered? Yes. 41 No. 156
- 7. Did you draw diagrams representing any difficult
 Historical situation, movement, or idea during the
 year? Yes. 62 No. 223
- 8. Did you draw any graphs representing any movement or idea? Yes. 13 No. 274

IX. Methods of Study Group.

1. Did you study History regularly during the year? Yes. 188 No. 120



- 2. Did you rely mainly on last moment cramming?
 (Study during the last month or two before the final examination.) Yes. 151 No. 116
- Did your teacher suggest methods of study?
 Yes. 186 No. 118
- 4. Did your teacher aid you by giving you study outlines? Yes. 149 No. 140
- 5. Did you study carefully before the term examinations set and corrected by your teacher? Yes. 213 No. 77
- 6. Were study assignments made by topics or by references to the number of pages to be studied? The former. The latter. (Discarded)

X. Student Activity Group.

- 1. Did the students present oral reports on topics to the class? Yes. 50 No. 153
- 2. Were there occasions when student reports and class discussion filled the entire period? Yes. 62
- 5. Was discussion in class encouraged? Yes. 230 No. 76
- 4. What other forms of pupil activity were allowed?
 - (Answers given in discussion of this group.)

XI. Text Book Group.

- 1. Were topics taken in the order presented in the text?
 Yes. 215 No. 73
- 2. Was the material in the text the only material presented to the students by the teacher?

 Yes. 125 No. 165
- 3. In the majority of lessons was the teacher obviously presenting carefully prepared material gathered from various sources to supplement the material in the text? Yes. 194 No. 108

XII. Individual Differences Group.

- 1. Were the poorer students concentrated upon by the teacher? Yes. 201 No. 93
- 2. Were they apparently neglected? Yes. 49 No. 246
- 3. Were the cleverer students concentrated upon by the teacher? Yes. 66 No. 221
- 4. Were they apparently neglected? Yes. 36 No. 245.

XIII. Current Events Group.

- 1. Was there instruction in Current Events by the teacher?
 Yes. 120 No. 167
- 2. Did the class study Current Events topics and report on them during class periods? Yes. 71 No. 216
- 3. How many periodicals or magazines providing reading in Current Events were available in the classroom or school?
 - 0 1 2 3 4 5 6 more 199 8 5 10 7 5 13 15



CHAPTER III

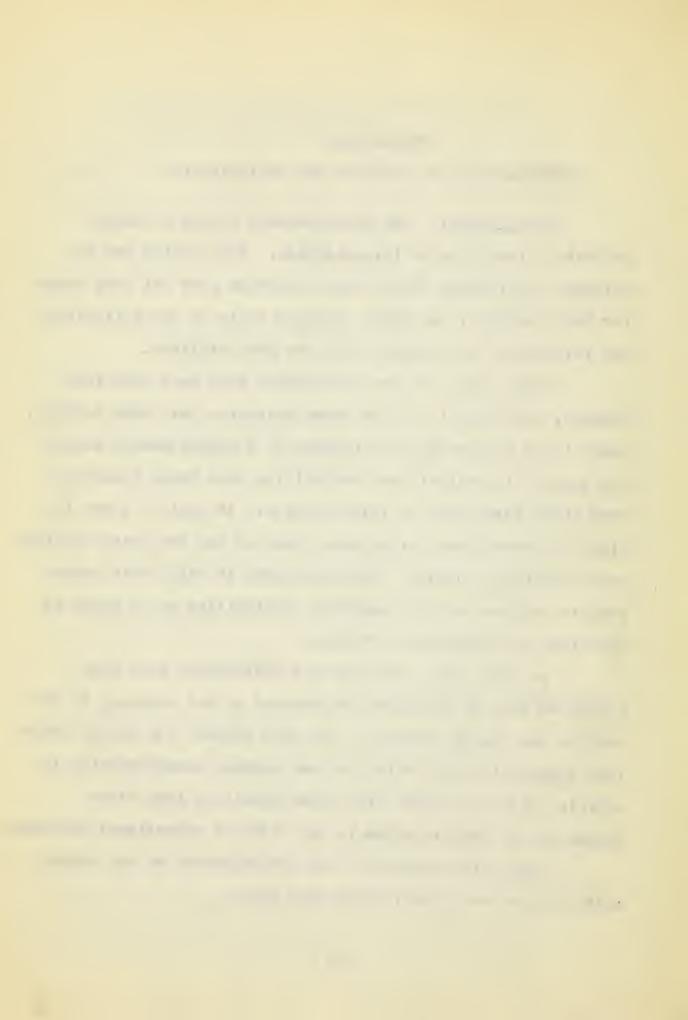
ESTABLISHMENT OF VALIDITY AND RELIABILITY

The Problem. - The questionnaire is not a purely scientific technique of investigation. Its results can be extremely misleading where proper measures have not been taken for their control, and where exacting tests of the reliability and validity of the answers have not been utilized.

Where such care and forethought have been exercised, however, and where the items found defective have been deleted, there is no reason why the findings of a questionnaire should not compare in validity and reliability with those resulting from other techniques of investigation. It must be borne in mind that educational situations, such as the one being studied, are exceedingly complex. Investigations in this field cannot hope to achieve the same degree of reliability as is found in the field of experimental Physics.

In this study such care and forethought have been exercised that an intensive measurement of the accuracy of the results has become possible. For this reason, the writer feels that the conclusions arrived at can compare satisfactorily in validity and reliability with those resulting from other techniques of investigation in the field of educational research.

Four main methods for the establishment of the trustworthiness of the results have been used.



The Affectivity Factor. The affectivity factor was introduced to probe the effects of the emotional reaction of the students to the subject of History, and to their teachers. This constitutes a test of the validity of the questionnaire. We often hear that a student's attitude towards a subject is colored and altered by the circumstances attending his study of it. Night not the student's attitude towards the methodology of his teacher be affected by his emotional reaction to both the subject and the teacher? The introduction of the affectivity factor should enable us to answer this question.

The Teacher-Student Control Groups. Six control groups were established, three of twenty students, and three of ten.

These ninety students were selected from the alumni of five

Edmonton high schools. Each group was homogeneous in so far as its members had been taught History 5 by the same instructor. The teacher of each group was asked to answer the question-naire. His or her answers furnished a key which measured the accuracy of the answers of the students. That this method of testing the accuracy of the results of the questionnaire involves reliability will be readily granted. The fact, however, that in many items misunderstanding of what was required may have occurred, suggests that this technique measures validity toc. We have, then, in this method a device for measuring the validity as well as the reliability of the results secured.

The Range of Variation .- Another device for the measurement of reliability was used. Knowing that the students of



each control group had received the same instruction, it was expected that their answers would bear a close relation to one another. The variation of their answers from the mean was taken to constitute a measure of the reliability of the information which they furnished.

The Repetition of Items. The ninety students of the various control groups were required to repeat their answers to twenty-eight of the items in the questionnaire in order to test the reliability of their original answers. This second test was given after an interval of three weeks had elapsed since the first administration of the items. A percentage estimate of the reliability of the original answers was then computed.

How the Affectivity Factor functioned. Validity has been defined as the degree to which a test or scale measures what it is claimed to measure. Emotional bias or prejudice, either against the subject or the instructor, may have influenced the answers of the students to various items of this questionnaire. To this degree the results must then be lacking in validity. In order to determine whether such an influence has been at work, and the degree to which it has altered the results, the affectivity factor has been introduced. It constitutes a measure of the degree to which the validity of the answers has been injured in this investigation, by the emotional reaction of the students either for or against their teachers or the subject of History.

The master sheet statement of the results of the control group reveals the fact that the students were distributed

according to emotional reaction to their year's work in History in a very definite fashion. The information, and the item which secured it follow.

TABLE I

AFFECTIVITY DISTRIBUTION OF THE CONTROL GROUP

Item 3. "Indicate your enjoyment of your year's work in History as fairly as you can on this scale."

Negligible	Slight	Average	Pleasant	Most Enjoyable
2	9	26	23	11

Fortunately there were eleven students who expressed the opinion that their year's work in History had been "Most Enjoyable", while a similar number indicated that their enjoyment of the year's work had been either "Negligible" or "Slight". Their questionnaire answer sheets were singled out for further study.

The six items which follow were then selected as most likely to be susceptible to the reflection of the emotional bias of the student, whether recorded consciously or unconsciously.

Methods of Teaching Group.

Item 12. Did the teacher cover a definite topic or unit of material in each teaching period?

Yes. No.

Review Group.

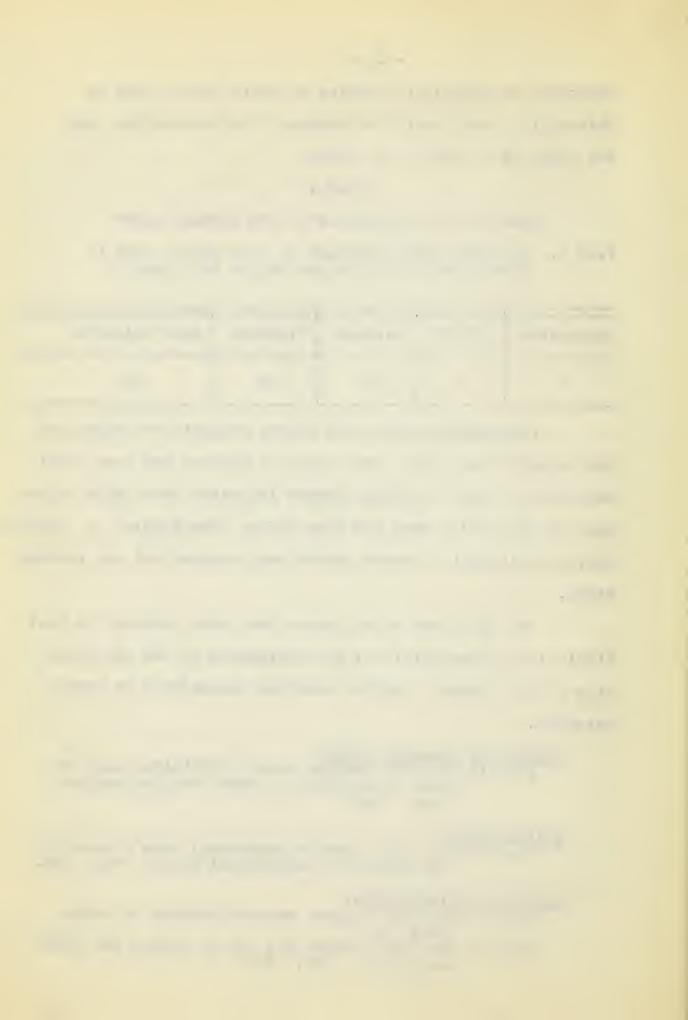
Item 5. Were they (review questions) more frequently on trivial or unimportant facts? Yes. No.

Hethods of Study Group.

Item 3. Did your teacher suggest methods of study?

Yes. No.

Item 4. Did your teacher aid you by giving you study outlines? Yes. No.



Student Activity Group.

Item 5. Was discussion in class encouraged? Yes. No.

Text Book Group.

Item 3. In the majority of lessons was the teacher obviously presenting carefully prepared material gathered from various sources to supplement the material in the text? Yes. No.

In these six items it was felt that the student would be tempted to allow his prejudice, whether favorable or unfavorable, to express itself. He might show his appreciation of the subject and the teacher, by endorsing the practice which seemed to him most creditable and praiseworthy, or he might display his hearty hatred for the subject or his antipathy to his teacher by indicating the more objectionable practice, the practice most discreditable to his teacher.

The answers of the twenty-two students referred to above were tabulated for the six items, and compared with the key answers furnished by the teacher of the control group. The results were as follows.

TABLE II

AFFECTIVITY FACTOR IN GROUP FINDING HISTORY ENJOYABLE

Group	Number of items ans- wered	Items agreeing with Teacher's Key	Answers which were over- favorable	Over-ad- verse answers
1.	12	12	0	0
2.	6	5	1	0
3.	15	12	1	2
4.	18	1.5	1	2
5.	0	0	0	0
6.	0	0	0	0
	51	44	3	4



TABLE III

AFFECTIVITY FACTOR IN GROUP FINDING LITTLE ENJOYMENT

Group	Number of items	Answers agree- ing with Teacher's Key	Answers which were over- favorable	over-ad- verse answers
1.	0	0	0	0
2.	6	3	3	0
3.	4	2	1	1
4.	12	9	3	0
5.	6	4	1	1
6.	30	25	4	11
	58	43	12	3

In Table II we find only four items, out of the total of fifty-one, which reflect the too partial attitude which we would expect in these students. Three, on the other hand, are adverse answers. Stated in percentages 7.8% of the answers are more favorable than the teacher's key would lead us to expect, while 5.8% are more adverse than expected. There is such a slight difference between the over-favorable answers and those which are adverse, that one is forced to the conclusion that the deviation is due to chance error and not to the direct influence of emotional bias. In other words, the affectivity factor has not played a significant part in inclining the students to answer in a fashion which would be flattering to the teacher, as might have been expected.

In Table III the part played by affectivity seems to be more important. Here, out of fifty-eight answers, 12 or 22.6% are adverse, disagreeing with the teacher's key. This suggests that the adverse emotional reactions, indicated by the answers of these students to the affectivity item, have been reflected in the form of answers derogatory to the teacher's skill and

efficiency. However, in this table too, there were 3 answers, or 5.2% of all the answers, of an over-favorable nature, and ascribable to chance error.

The few cases examined do not permit a reliable generalisation. However, on the evidence available, one is forced to the conclusion that the effect of a favorable emotional bias towards the subject is negligible, while an unfavorable attitude appears to reflect itself, slightly but definitely, in an adverse and unfavorable report on the teacher's work. In other words, emotional bias against a subject injures the validity of the answers to a questionnaire to some extent. Allowing for chance error, however, the amount of the injury does not greatly invalidate the results gained. The fact that such a small number, eleven out of ninety students, were adversely affected still further reduces the amount of loss in validity due to this reason.

The Teacher-Student Control Groups. The reliability of a questionnaire is interpreted as the accuracy with which it measures whatever it does measure. The most useful device for measuring the reliability of this questionnaire has proven to be the Teacher-Student Control Group. The following control groups were established.

DISTRIBUTION OF STUDENTS IN CONTROL GROUPS

No. of	School from which	Number of Students
Group	Group was taken	in Group
1.	Victoria High (Group a)	20
2.	Victoria High (Group b)	20
3.	Strathoona High	20
4.	Garneau High	10
5.	Separate High	10
6.	Eastwood High	10
9.	To	tal 90



The students of each control group had the same instructor in History. The teacher in each case answered the
questionnaire, as well as his or her students. The teacher's
answer was then used as a key by which the accuracy of the
answers of the students could be measured, and thus, an
estimate not only of the reliability but also of the validity
of the entire questionnaire was possible.

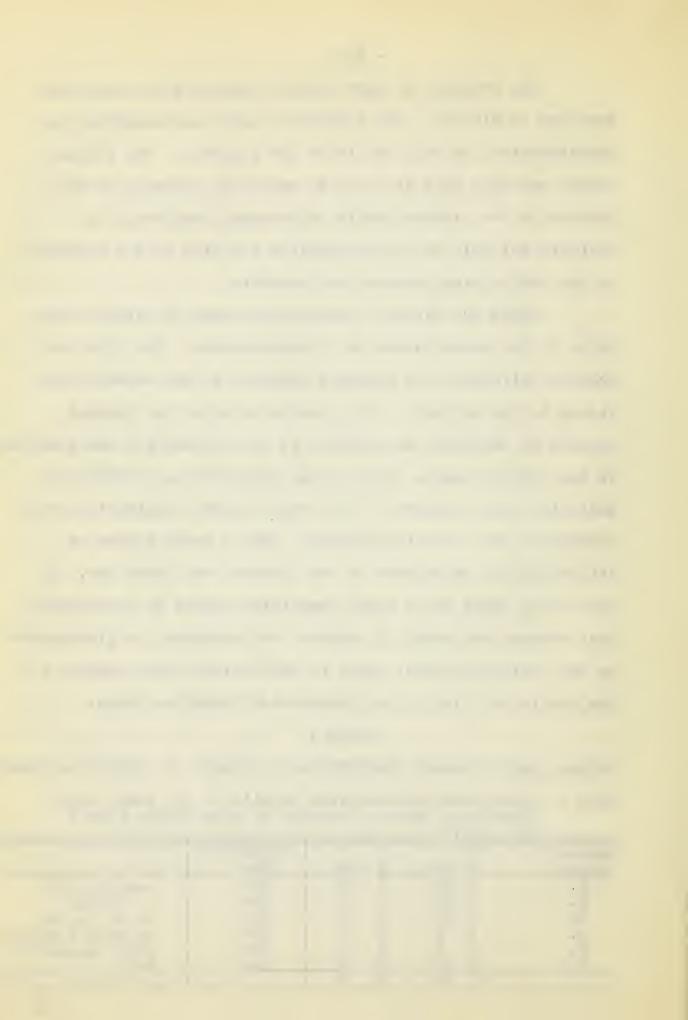
There are several factors which must be watched carefully in the construction of a questionnaire. The first and greatest difficulty is ensuring accuracy in the answers furnished by the subjects. This source of error was guarded against as carefully as possible in the preparation and revision of the various items. Those which contained any element of ambiguity were censored. Those which seemed difficult of comprehension were likewise removed. Thus a great degree of reliability in the answers of the students was hoped for. In some cases there was a truly surprising degree of correspondence between the marks of teachers and students, as illustrated by the following table, which is the control group summary of the results of Item 2, the Examination Technique Group.

TABLE V

CONTROL GROUP SUMMARY DEMONSTRATING ACCURACY OF STUDENTS' ANSWERS

Item 2. "Were these examinations usually of the essay type? (Requiring answers in essay or composition form.)

Control Group	Yes	No	Teacher's Key	
1. 2. 3. 4. 5.	20 18 20 9 9	0 1 0 1 1 0	Yes Yes Yes Yes Yes	Reliability 96.6% 86 of the 89 answers agreeing with teacher's key



Allowing for possible misinterpretations of the item, and considering the elements of haste and nervousness, the results were astonishingly accurate.

It must be admitted, however, that on other items the answers did not always coincide with the key given by the teacher in any satisfactory degree. The following data gained from Item 1, Teachers' and Pupils' Aids Group, will illustrate this lack of agreement found on some items, clearly.

TABLE VI

CONTROL GROUP SUMMARY ILLUSTRATING LACK OF RELIABILITY OF STUDENTS' ANSWERS

Item 1. "Were teachers' aids or pupils' helps (printed handbooks constituting a synopsis of the year's work in History) used by the teacher? Yes. No."

Control Group	Yes	No	Teacher's Key	
1.	0	20	No	Reliability
2.	1	16	Yes	46.5%
3.	6	13	Yes	40 of 86
4.	0	10	No	answers agree-
5.	1	9	Yes	ing with key
6.	2	8	Yes	
	10	76		

Here the opinions of the students ran counter to the key furnished by the teacher to such an extent that one is forced to the conclusion that the students did not know, and apparently had no means of knowing whether the teacher made use of such aids or not. As a result this item was discarded.

Another possible source of error in a questionnaire lies in the attitude of the teacher furnishing the key for checking the reliability of the control group answers. Several of the instructors who provided such answer keys volunteered the information that they were not quite certain of their own method-

ology in certain instances. This is quite explainable. It is not usual for a teacher to adhere to stereotyped methods and procedures. Better interest is secured through the introduction of variety into the recitation. As a result, however, there must be some lack of accuracy in their answers, and these will tend to show a pseudo-unreliability in the questionnaire, when they prove the answers of the control group students faulty.

Careful study of the control group results and the teacher's keys suggests that still another source of error is present. This source of weakness speaks highly for the sincerity and modesty of the teachers who co-operated with the writer in furnishing answer keys with which to check the reliability of the control groups. There was apparent, in several instances, a tendency on the part of the teacher to underestimate or undervalue his or her procedures and devices. So definite was this tendency in certain cases, that the students' answers were made to appear unreliable when they estimated the procedures of the teacher in a more flattering fashion. This situation is illustrated in the following table, where modesty seems almost to have triumphed over truth.

TABLE VII

EVIDENCE OF UNDERESTIMATION OF THEIR OWN ABILITIES BY CONTROL GROUP TEACHERS

Item 2. "Were the review questions asked in class answerable by a single isolated fact or idea? Yes. No."

Group	Yes	No	Teacher's Key
1.	2 4	18 14	Yes Yes

Here we see that the students are most decidedly of the opinion that the teacher used the superior device, while the teachers seem equally convinced that they did not.

The Range of Variation. Where percentage or time estimates are required, the range of variation of the students' answers forms another method of determining the reliability of the questionnaire. In certain items the students' answers vary wildly. Here, obviously little value can be attached to the results. In others, where there is a definite "bunching" of answers, the reliability must be admitted. The following table illustrates an item whose lack of reliability was betrayed by the range of variation of the students' answers.

TABLE VIII

UNRELIABILITY DETECTED BY THE RANGE OF VARIATION OF ANSWERS

Item 5. Note Book Technique Group. "Approximately what percentage of the note book was dictated by the teacher? 02: 20%: 40%: 60%: 80%: 100%."

Control Group	0%	20%	40%	50%	80%	100%
1.	5	6	1	2	8	0
2.	5	7	4	3	1	0
3.	0	2	0	1	11	6
4.	1	5	0	1	0	0
5.	7	3	1	0	0	0
6.	3	6	0	1 0	0	0

Here we can see that in the cases of the first two control groups there is not the slightest reliability, the estimates of the students being distributed fairly evenly over a range of from 0% to 80%. In the cases of the last four control groups there is a more reasonable range of variation which suggests a closer approximation to accuracy.



In other cases the range of variation criterion of reliability gives its definite approval to the results gained. This is indicated clearly in the following item from the Methods of Teaching Group.

TABLE IX

RELIABILITY PROVEN BY RANGE OF VARIATION METHOD

Item 9. "What percentage of time was usually thus occupied? (Referring to the amount of time consumed in review at conclusion of the lesson.)"

Group	0-10	10-20	20-30	30-40	40-50	50-60	60-70
1. 2. 3. 4. 5.	2 9 15 2 6	2 3 2 4		range	90-100.	ntinues without the range	a single

Here the close concentration of answers in a 0% to 20% range suggests the reliability of the information being secured.

Repetition of Items. A fourth device for testing the reliability of a questionnaire's items was found in the repetition of answers by the students. It was felt that if the students could complete a portion of the questionnaire for a second time after an interval had elapsed, the correspondence between their first and last answers should give an additional criterion of the reliability of the entire study.

A random sampling of the items which were to be repeated was necessary. Consequently page 2 of the question-naire was resubmitted to members of the control groups. It was felt that since it included percentage estimates, and time



estimates, as well as the ordinary type of items, it constituted a fair measurement of the correspondence between
their first answers and their later ones. Twenty-eight items
were repeated. The results secured were rather interesting
in their uniformity. The exact record of the repeated items
follows.

TABLE X

TESTING OF RELIABILITY BY REPETITION OF TWENTY-EIGHT ITEMS

Control Group	Percentage of agree- ment with first answers.	
1.	76.53	Weighted per-
2.	73.51	centage of agree-
3.	73.92	ment of the six
4.	76.40	control groups.
5.	68.33	(Ninety students.
6.	75.51	74.24

Considering the variety of items, and particularly the number of estimation items which were repeated, this degree of reliability seems highly satisfactory and compares favorably with that obtained in other psychological and educational investigations.

CHAPTER IV

THE CONTROL GROUP SUMMARY

The discussion of the conclusions which have been arrived at as a result of this investigation would be barren. without a detailed report of the manner in which the control group results were used. The exact data, which resulted in the censoring of certain items as invalid or unreliable, and the inclusion of others as worth while, is of interest. another justification of its inclusion lies in the fact that the procedures and devices utilized here for the compilation of information may possibly prove of value, for purposes of comparison, to other students who wish to use the same technique of investigation. For these reasons the data gained in the summary of control group results is reproduced here.

General.

- 1. Number of teachers in school -Six or more teachers in all cases. City High Schools.
- 2. Number of students in class -

the administration of the second		
1. Range	25-50	Key. 25-50

- 35-45 2.
- 3. 35-45
- 35-50
- 4. 5. 20-50
- 35-45
- Affectivity factors -

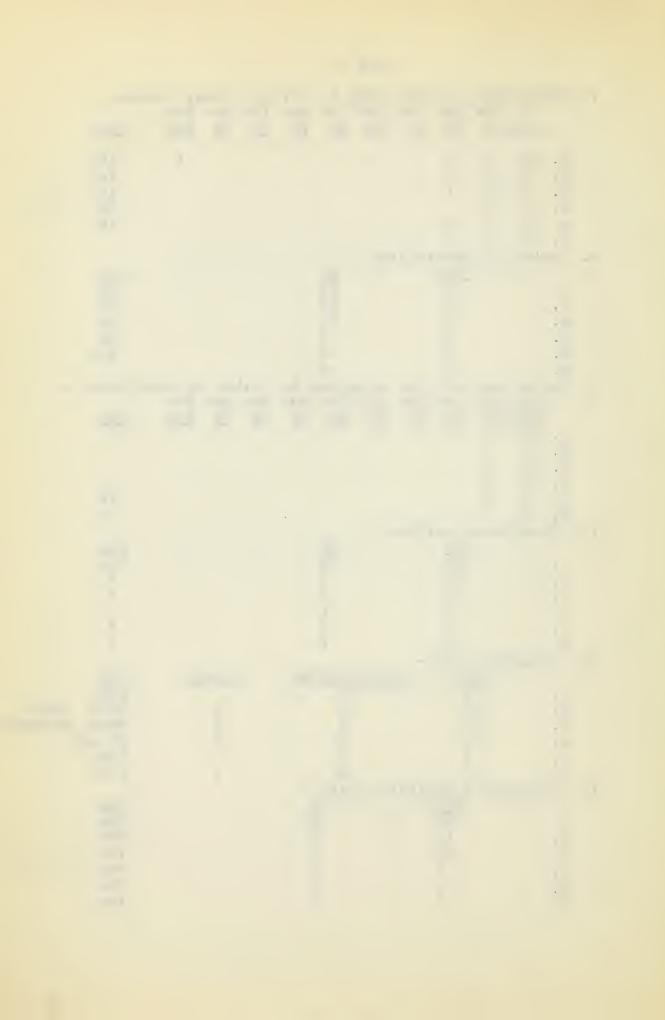
	N.	3.	A.	P.	M.E.
1.	Ō	8.	<u>A</u> .	P.	M.E.
		2	9	8	1
2.		1	7	8	4
4.		2	1	4	3
		-	4	FE	

I. Methods of Teaching Group.

1.	Length of	neriod -						
		9 within	5 m1n	of ker	of ther	W 0 Y	Way 25	
	2. 30-40 2		5 "	n n	ar cuar.	Was y		
				27 77	49	28	00	
	3. 25-40 1		5 "				" 33	
	4. 30-35 a		3 "	99 99	94	90	" 33	(Dis-
		6 "	5 "	19 19	**	19	" 40	carded)
		9 #	5 "	65 85	99	16	* 33	
2.	Percentage	used for	teachi	ng -				
	0- 10-	20- 30-	40- 50-	- 60- 70	- 80-	90-		
	10% 20	30 40	50 60	70 80		100	Key	
	1.	1 1	1 1	2 5		6	75	
	2.	1 1 1 2	4 7	4 1		1	50	
	3. 2	1	1 6	1 2		3	80	
		4.				1		
	4.		2			T	80	
	5.	2 1	3 1	1 2			55	
	6.	2	1 2	3 1			80	
3.	Percentage	devoted	to text	book s	tudy -			
	0- 10-	20- 30-	40- 50-	- 60- 70	- 80-	90-		
	10% 20	30 40	50 60	70 80	90	100	Key	
	1. 13 6	1			* **********		20	
	2. 8 8	2 1					30	
	3. 5 5	4	2 1		1	2	20	
			6 L		ide	Dist		
	4. 4 3	1 1					0	
	5. 4 2		1 1				0	
	6. 4	3 1		2			10	
4.	Percentage							
		20- 30- 4	10- 50-	60- 70-	80- 9	0-		
	10%20	30 40 5	60	70 80	90 1	00	Key	
	1. 7 9	2 1	1				25	
		10 1	2 2				10	
	3. 5 7	4 4					20	
	4. 0 5	2 1	1				5	
		3 0	2 2	1			15	
	· ·		6 60	4				
	6. 6	3 1					0	
5.	Review at	beginning	3 **					
		Tes		No			Key	
	1.	20		0			Yes	
	2.	18		2			17	
	3.	19					99	
	4.	7		2 1 5			97	
	5.	9		1			00	
	6.	5		5			No	
			erial -				210	
6.	Review of		ATT OF	WA			Wa-	
		Yes		No 9			Key	
	1.	9		3.0			No	
	2.	8		12			(D1	scarded)
	3.	14		4			44 -	
	4.	5		4			11	
		6		4			Yes	
	5.	4.		5			No	
	6.	4:		9			MU	



7. Percentage	of time use	d in rev	iew before	lesson -	
0- 10- 10% 20	20- 30- 40- 30 40 50	50- 80- 60 70	70- 80- 9 80 90 1	0- 00 Key	
1. 10 6	3			1 10	
2. 8 7	5 1			10	
3. 7 12	1			15	
4. 2 6 5. 2 6	2			15	
6. 8 2	6			15	
8. Review at	aonelusien -				
	[08	No		Key	
1.	3	16		No	
2.	3	17		No	
3.		11		No	
4.	9 5	5		No	
5.	6	4		Yes	
6.	5	4			
9. Percentage					***
	20- 30- 40-				
	30 40 50	80 70	80 90 1	00 Кел	
1. 2 2					
3. 15 3					
4. 2 2					
5. 6 4				15	
6. 8 1				10	
10. Blackboard	doutline -			***	
	Tes	No		Key	
1.	20	0		Yes	
2.	10	8		12	
3.	15	5		19	
4.	9	1		99 10	
5.	6	3		18	
6.	9	1		**	
11. Teaching	LIGS -	a matas	No aid	Var	
1.	4	e notes	No att	Key L.N.	
2. 13		5	2	Text	(Dis-
3. 1		3	2	Text	carded)
	4.	3	3	No aid	
	7	3		L.N.	
	5	4	3	A11	
	a definite t	opic -			
	Yes	No		Key	
1.	19	1		Yes	
2.	17	1 3 7		Yes	
3.	12	7		Yes	
4.	9	1		Yes	
5.	5	5 3		Yes Yes	
6.	7	0		Tea	



13.	Prog	ress as		as tir					
	9		2.5		No			Key	
	1.		1		15			No	
	2.	9			9			No	
	3.	12			8				(Discarded
	4.	4			6			No	
	5.	8			2			No	
	6.	4	4		6			No	
II. No	te Bo	ok Techr	11 que	Groun	2.				
1.	Were	there I		Books					
	_		9.8		No			Key	
	1.		0.5		0			Yes	
	2.		05		0			Yes	
	3.		05		0			Yes	
	4.		10		0			Yes	
	5.	3	10		0			Yes	
	6.		9		1.			Yes	
2.		est per					in Note		and
		0%	50	40	60	80	100	Key	
	1.					2	18	100	
	2.					20		100	
	3.				2	8	10	100	
	4.	1			1	3	5	100	
	5.				4	3	3	100	
	8.	1	1	1	1	5	1	60-80	
3.	Main	ly const	truct	ed by		t -			
		3	108		No			Key	
	1.		3		16			No	
	2.	1	15		5			Yes	
	3.		3		17			No	
	4.		6		4			No	
	5 .		7		2			Yes	
	6.		7					Yes	
4.	Main	ly const	truct	ed by	teache	ľ, m			
			Yes		N	0_		Key	
	1.		17		<u>N</u>			Yes	
	2.		4		16 2 6			No	
	3.		4.18		2			Yes	
	4.		4		6			Yes	
	5.		1		9			No	
	6.		2		8				
5.		entage d	licta	ted by	y teach	er (ne	earest)	· '	
		0%			60 8	0 ;	100	<u>Key</u> 50	
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	2.	0% 5 5	7	4	3	1		20	
	3.		7 2		1 1	1	6	80	
	4.	4	5	0	1				
	5.	7	3	1				0	

0-20



6.	Par	eant.	200	writte	n 02	hoer	d by		aah		
	- 0.	0%	20	40	60	80		00	# OII	Key	7
	1.	all	4	2	9	5		Y		80	
	2.	9	11	~						40	
	3.	2	8	2	1	1		2		20	
	4.	1	3	0	1	4		1		60	
	5.	5	2	3		_					
	6.	5	3								
7.	Wez	e th	еу с	o-oper	ative	ly r	rena	ared	9		
				Yes			No			Key	7
	1.			10			9			Yes	
	2.			1.3			6			Yes	
	5.			1			19			No	·
	4.			4			6			Yes	3
	5.			8			4			Yet	3
	6.			3			7			No	
8.	Per	cent	age	of N.I	. ent	irel	ly of	f st	ude	nt cor	istruction -
		0%	20	40	60	80	1	00		Ke	
	1.	2	13	3		2				10	
	2.	3	1	3	4	9				80	
	3.	5	9	3	2	1				20	
	4.	2	4	1	1	2				40	
	5.	1		1	1	2		5		95	
	6.		2		1	5		2		60	0-80
9.				tly of					ins		Key
				withir				rey.		exact	0
	2.	0-6	12	92	3	19	11	19	3	19	2
	3.	0-10	17		3	17	99	20	5	10	0
	4.	1-4	all	10	3 3	99	10	99	1	19	2 8
	5.	2-9	5	20	3	10	99	98	0	11	6
7.0	6.			ig rest	_		130 A 70 A			pob.	9
10.	ا يك لاند	7 0119	OWTI	Yes	LLV AM	e meneral	No	S TO C VI		Ke	a Tr
	1.			8			77			Ye	
	2.			8			2			Ye	
	3.			9			5			Ye	
	4.			6			3			Ye	
	5.			9			1			Ye	
	6.			5			5			Ye	
11.	Wes	e th	e no	tes va	luabl	e fo	rr	e ive	w?	-	
				Yes			No			I	Cov
	1.			20						Ye	
	2.			20						Ye	
	3.			20						Ye	
	4.			10						Ye	
	5.			10						Ye	
	6.			9			1	A = % =	. 2	Ye	
12.	We	re th	ere		neadl	ngs			TRI		b-headings?
				Yes			No				ev
	1.			17			6				0.5
	2.			11			, pe				0.5
	3.			13			7				e s e s
	4.			9			1				08
	5.			8			2				0 S
	6.			0			64				



13.			W	W	90 .	
	1.		Yes	No	Key	
	2.		3	17	No	
	3.		12	8	Yes	
	4.		6	4	Yes No	
	5.		2	8	Yes	
	6.		4	6	Yes	
14.		the e	tudents ma	-	during les	gang -
***	220	on o	Yes	No	Key	bon! -
	1.		10	10	Yes	
	2.		1	19	Yes	
	3.		•	20	No	(Discarded)
	4.		4	5	Yes	(
	5.		1	9	No	
	6.		2	8	Yes	
15.	Were	thev			e instructi	on? -
			Yes	No	Key	
	1.		6	14	No	
	2.		1	19	Yes	
	3.		18	1	Yes	(Discarded
	4.		5	5	No	,
	5.		7	3	Yes	
				•		
. <u>R</u>	6. evi ev	Grou	<u>p</u> .	2	Both	
	evi ev		p. ly review	classes	ain-	
	evi ev Excl		D. ly review Yes	classes No	- Key	
-	Excl		D. ly review Yes 16	classes No 4	<u>Key</u> Yes	
-	Excl		D. ly review Yes 16 15	classes No 4 3	Key Yes Yes	
-	Excl 1. 2. 3.		ly review Ves 16 15	classes No 4 3	Key Yes Yes Some	times
	Exc] 1. 2. 3.		ly review Ves 16 15 10 5	classes No 4 3 10	Key Yes Yes Some Yes	
	Exc] 1. 2. 3. 4. 5.		ly review Yes 16 15 10 5 2	classes No 4 3	Key Yes Yes Some	
1.	Exc. 1. 2. 3. 4. 5. 6.	usive	D. ly review Yes 16 15 10 5 2	classes No 4 3 10 5 8	Key Yes Yes Some Yes Yes	times
1.	Exc. 1. 2. 3. 4. 5. 6.	usive	ly review Yes 16 15 10 5 2 2 estions as Yes	classes No 4 3 10 5 8 8	Key Yes Yes Some Yes Yes	times
1.	Exc. 1. 2. 3. 4. 5. 6.	usive	ly review Yes 16 15 10 5 2 2 estions as Yes	classes No 4 3 10 5 8 8 aswerable No 18	Key Yes Yes Some Yes Yes No by isolate Key	times
1.	Exc. 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions and Yes 4	classes No 4 3 10 5 8 8 aswerable	Key Yes Yes Some Yes Yes No by isolate Key	times
1.	Excl 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions as	classes No 4 3 10 5 8 8 aswerable No 18 14	Key Yes Yes Some Yes Yes No by isolate Key	times
1.	Exc. 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5	Key Yes Yes Some Yes Yes No by isolate Key Yes Yes Yes No	times
1.	Exc. 1. 2. 3. 4. 6. Revi	usive	D. ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8	Key Yes Yes Some Yes Yes No by isolate Key Yes Yes No No	times
1.	Exc] 1. 2. 3. 4. 5. 6. Revi	usive	D. ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2 3	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7	Key Yes Yes Some Yes Yes No by isolate Key Yes Yes No No	times
1.	Excl 1. 2. 3. 4. 5. 6. Revi	usive	D. ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7 reasoned	Key Yes Yes Some Yes Yes Yes No by isolate Key Yes Yes Yes No No No Answer? -	times
2.	Excl 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2 require a Yes	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7	Key Yes Yes Some Yes Yes No by isolate Key Yes Yes Yes No No No No Answer? - Key	times
2.	Excl 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2 3 require a Yes 19	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7 reasoned	Key Yes Yes Some Yes Yes No by isolate Key Yes Yes No No No Answer? - Key Yes	times d fact -
2.	Exc] 1. 2. 3. 4. 5. 6. Revi 1. 2. 3. 4. 5. 6. Did	usive	ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2 3 require a Yes 19 17	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7 reasoned No	Key Yes Yes Some Yes Yes No by isolate Key Yes Yes No No No No answer? - Key Yes Some	times d fact -
2.	Exc. 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2 require a Yes 19 17 12	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7 reasoned No	Key Yes Yes Yes Yes No by isolate Key Yes Yes No No No Answer? - Key Yes Some	times d fact -
2.	Excl 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions ar Yes 2 4 12 4 2 require a Yes 19 17 12 5	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7 reasoned NO	Key Yes Yes Yes Yes No by isolate Key Yes Yes No No No Answer? - Key Yes Some	times d fact -
2.	Excl 1. 2. 3. 4. 5. 6. Revi	usive	ly review Yes 16 15 10 5 2 2 estions as Yes 4 12 4 2 require a Yes 19 17 12	classes No 4 3 10 5 8 8 aswerable No 18 14 7 5 8 7 reasoned No	Key Yes Yes Yes Yes No by isolate Key Yes Yes No No No Answer? - Key Yes Some	times d fact -

II



	Did rev	* O W	Anap	CLOH	OH	Tage	re	quire	1 mp	ortant	racts?	16
	1.		1	9.8		No		Key				
	2.		i			1		Yes				
	3.		2	-				Yes				
	4.							Yes				
	5.		1					Yes				
				9		1		Yes				
80	6.	200	1					No				
5.	Were th	eh o	n tr				-					
			I	8.6		IO		Key	,			
	1.					0.5		No				
	2.			S		18		No				
	3.			L	3	19		No				
	4.			L		8		No				
	5.				1	10		No				
	6.		1	L		9		No				
6.	Did the	tea	ching	g com	tinu	e to	th	e fina	18?	-		
			Y	18	I	0		Key				
	1.					20		No				
	2.				2	05		No				
	3.					20		Tes				
	4.		1	L		9		No				
	5.		3			9		Yes				
	6.		4			6		No				
7.	How lon	e wa	s the	rev	iew		od?		Ke	NF.		
	1. 2-6	WKB.	13 v	ri thi	n 2	wks.	of	Key	2	wks.		
	2. 3-8	19	16	19	2	11	12	09	6	11		
	3. 2-8	19	13	10	2	99	19	10	2	19		
	4. 3-8	19	6	11	2	19	19	10	6	10		
	5. 0-8	19	3	28	2	19	69	09	0	19		
	6. 0-3	99	10	29	2	20	89	10	2	10		
8.	Did tea		-		- 1	inat	4 0 10		-			
•	DIG OGG	OTT OT	Ye				TOU	-	LOUS			
	1.		18		-	2		Kev				
	2.		19			1		Yes				
	3.		18					Yes				
	•		10			1		Yes				
	4.					1		Yes				
	5.		10			0		Yes				
	6.		7			2		Yes				

IV.

1.	Number	of examinations per year -	Key
	1. 3-1	0 14 with 1 of Key	3
	2. 20	exactly right with Key	3
	3. 2-8	9 within 1 of Key	2
	4. 5-6	all within 1 of Key	5
	5. 6-2	0 poor correspondence	30
	6. 2-4	all within 1 of Key	3



2.	Essay Type -			
	777.7	Yes	No	Key
	1.	20	0	Yes
	2.	18	1	Yes
	3.	20	0	Yes
	4.	9	1 .	Yes
	5.	9	1	Yes
	6.	10	0	Yes
3.				
		Yes	No	Key
	1.	1	No 19	No
	2.	1	17	No
	3.	1	16	No
	4.	1 1 2	8	No
	5.	2	8	Yes
	6.		10	No
4.	Both methods	1/0		-
		Yes	No	Key
	1.	2	No. 17	No
	2.		17	Yes
	3.	1	18	No (Discarded)
	4.	3	7	No
	5.	2	7	Yes
	6.		9	No

V. Teachers' and Pupils' Aids Group.

1.	nsec b?	Teacher -			
		Tes	No	Key	
	1.		20	No	
	2.	1	16	Yes	
	3.	6	13	Yes	(Discarded)
	4.		10	No	
	5.	1	9	Yes	
	6.	2	8	Yes	
2.	Used by	pupils -			
		Yes	No	Key	
	1.		No 20	No	
	2.		20	No	
	3.	1	19	No	•
	4.		10	No	
	5.		10	No	
	6.		10	No	

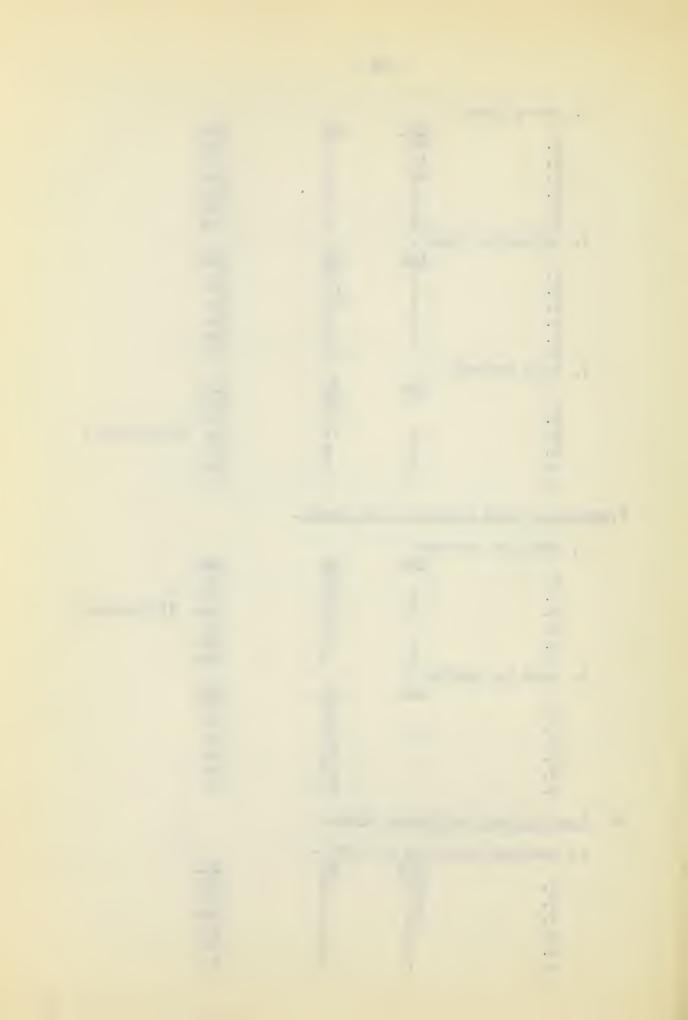
VI. Reading and Reference Group.

1.	Reading	confined to	rext -
		Yes	No
	1.	18	2

1.	18	2
2.	16	4
3.	20	0
4.	6	4
5.	9	1
6.	7	3

Yes Yes No

Key Yes Yes



```
2. How many additional books did you read? -
       1. 19 read none; 1 read 5.
       2. 4,2,1, and 17 read none.
       3. all said 0.
       4. 2 said few, rest 0.
       5. 10 said 0.
       6. 3 said 2; 7 said 0.
    3. How many were available in school? -
                                                  Key
       1. 8,3,10,25,25 and 15 said none.
       2. 10-0; most 0.
                                                   1
                                                       (Discarded)
       3. 10 7 2 rest 0.
       4. One said few: 9 said 0.
       5. 10 said 0.
       6. 1 said three, one two and rest 0.
    4. Did you read text carefully? -
                                            Key
                      Yes
                                No
       1.
                      10
                                10
       2.
                       4
                               14
       3.
                      12
                                 8
       4.
                      10
                                 0
       5.
                       7
                                 3
                       8
                                 2
       6.
VII. Essays and Written Work Group.
    1. How many essays? -
                                            Key
       1. 1-10 15 within 2 of Key
                                             1
                11
       2. 0-5
                     5.5
                                             1
       3. 0-4
                18 said 0
                                             0
       4. 0-1
                 1 said one; rest 0
                                             0
                 6 right by key
       5. 0-3
       6. 0-2
                 6 said 2; rest right
                                             0
    2. Were short exercises chief written work? -
                      Tes
                               No
                                            Key
                                2
       1.
                      18
                                            Yes
                                1
       2.
                      19
                                            Yes
                                 4
       3.
                      14
                                            Tes
                                 3
                       7
                                            Tes
       4.
                       8
                                 2
                                            Tes
       5.
                                 2
                       8
                                            Tes
       6.
    3. How many of these per month? -
                                            Key
       1. 0-4 close together
       2. 10-0 11 within 2 of Key
       3. 0-20 10 said 1 or 2
       4. 0-15 all but 1 13 wide of Key
                                             15
                                              3
       5. 0-4 6 within 1 of Key
       6. 0-15 4 within 1 of Key
    4. Was there usually a written assignment before lesson? -
                                            Key
                               No
                      Yes
                               20
                                            No
       1.
                                4
                                            Yes
       2.
                      16
                               13
                                            Yes
                                                   (Discarded)
                       6
       3.
                       2
                                7
                                            Tes
       4.
```

9

4

No

No

1

8

5.

6.



5.	Was the	re a study as	signment	before cl	888? -
		Yes	No	Key	
	1.	11	9		
	2.	12	7	Yes	
	3.	18	2	Yes	
	4.	10	0	Yes	
	5.	10		Yes	
	6.	9	1	Yes	
6.	Did you	do 1t? -			
		Yes	No		
	1.	11	9		
	2.	10	3		
	3.	10	8		
	4.	9	1		
	5.	6	4		
_	6.	5	5		A Property of the Control
7.		u required to	write re	views or	summaries of
	each le				
	_	Yes	No	Key	
	1.	1	19	No	
	2.	5	15	Yes	
	3.	1 2	19	No	
	4.	2	8	No	
	5.	5	5	No	
	6.	1	6	No	
		Graphical Ex		-	
1.		of maps made		Key	
		14 within 2	or Key	3	
	2. 10-0			2	
		4 right 8 sa		2	
	4. 2-8	7 within 3 o	I Key	3	
		all over 8 f		15	
		7 within 2 o			
2.	Entirel:	y constructed			
		Yes	No	Key	
	1.	11 18	9	Yes	
	2.	6	6	Yes	
	3.	9	1	Yes	
	4.	9	î	Yes	
	5.	8	2	Yes	
~	6.			Yes	4444140
3.	Were th	ey outline ma			derarist -
		Yes	No	Kev	
	1.	6	14	No	
	2.	4	14	No	
	3.	2	6	No	
	4.	3	7	Yes	
	5.	1	9	No	
	6.	0	7	No	



		001.	B.W.		Key	
	1.		20		B.W.	
	2.		18		10	
	3.		7		10	
	4.		8		#	
	5.	1	7		001.	
100	6.		6		B.W.	
0.	Time to compl					
	1. 10-60 16					
	2. 10-30 all				10 .0	2.0
		WITHIN	3-20 ra	nge or	TO OI	T
			E 0			
	5. 4-60 7 wi					
e	6. 15-30 9 w Did you draw		0 01 20.			
	Did you araw		Ti a		77 0 42	
	1.	Yes	20		Key	
	2.		20		No	
	3.	10	7		No	
	4.	10	10		No	
	5.		9		No	
	6.		8		No	
7	Did you draw	diagram			¥4.4	
	270 300 0200	Yes	No		Key	
	1.	4	15		No	
	2.	1	18		No	
	3.	4	16		No	
	4.	3	7		No	
	5.		9		No	
	6.		8		No	
8.	Did you draw	graphs?				
	Jan 3	Yes	No		Key	
	1.	-4	20		No	
	2.		20		No	
	3.		19		Ho	
	4.	1	9		No	
	5.		9		No	
	6.		8		Ho	
Me	thods of Study	Group.				
1.	Did you study	regula	rly? -			
* *	and Jon sound	Yes	No		Key	

IX.

1.	Did you	study	regula	irly? -	
			Yes	No	Key
	1.		6	14	
	2.		4	16	
	3.		12	8	
	4.		9	1	
	5.		4	6	
	6.		7	3	



	DIG	304 101	y on cram		Lasty -	
	1.		Yes 17	No 3		
	2.		17	3		
	3.		13	7		
	4.		3	6		
	5.		6	3		
	6.		7	3		
3.		teacher			of study? -	
			Yes	No	Key	
	1.		17	3		
	2.		15	2	Tes	
	3.		12	8		
	4.		6	2	Yes	
	5.		8	2	Yes	
	6.		6	4	Yes	
1.	Did	teacher			atlines? -	
			Yes	No	Key	
	1.		17	3		
	2.		12	6	Yes	
	3.		8	7		
	4.		5	4	Yes	
	5.		5	5	Yes	
	6.		1	9	No	
5	Did	you stu	dy for te		nations? -	
			Yes	No		
	1.		15	5		
	2.		13	6		
	3.		15	4		
	4.		8	1		
	5.		7	1		
	6.		2	7		
6.	Mere	study a			ics or numbe	r of pages?
			Former	Latter	Key	
	1.		14	5		
	2.		13	4	former	
	3.		7	10	both	1
	4.		5	5	former	(Discarded)
	5.		4.	5	former	
	6.		3	6	latter	

X. Student Activity Group.

1.	Were	there	oral repor	rts by a	students? -
			You	Wa	Kev

	Yes	Ho	Key
1.	2	18	No
2.	11	77	No
3.	1	18	No
4.	3	7	No
5.	4	5	Yes
6.	3	6	No



2.	Did student	reports	and	class	discussion	fill	anv
	entire peri	ods? -					

	Yes	No	Key
1.	5	15	No
2.	7	11	No
3.	3	13	No
4.	3	7	No
5.	4	5	No
6.	1	8	No

3. Was discussion encouraged? -

	Yes	No	Key
1.	20		Yes
2.	20		Yes
3.	15	5	Yes
4.	7	3	No
5.	10		No
6.	3	η	No

- 4. Other forms of pupil activity -
 - 1. Arguments.
 - 2. Debates.
 - 3. B.B. work and discussion.
 - 4. Discussion.
 - 5. Competition.
 - 6. B.B. work.

XI. Text Book Group.

1. Were topics taken in text order? -

	Yes	No	Key
1.	5	15	No
2.	19	1	Yes
3.	19	1	Yes
4.	10		Yes
5.	4	5	Yes
6.	9		Yes

2. Were materials presented only from text? -

	Yes	No	Key
1.	5	15	No
2.	10	10	Yes
3.	7	13	No
4.	2	8	No
5.	6	4	No
6.	6	4	No

3. Was carefully prepared material presented by teacher? -

	Ies	NO	Key
1.	20		Yes
2.	10	7	Yes
3.	15	5	
4.	3	7	
5.	6	3	Yes
6.	3	7	



XII. Individual Differences Group.

	Mere	poor	students	concentrated	upon by teac	her? -
			Yes	No	Key	
	1.		15	4	No	
	2.		6	12	No	
	3.		17	2	Yes	
	4.		10		Yes	
	5.		6	3	Tes	
	6.		5	5	Ro	
	Were	they	neglected	1? -		
			Yes	No	Key	
	1.		1	19	No	
	2.		2	15	Yes	
	3.			20	No	
	4.			10	No	
	5.			9	No	
	6.		3	7		
		the	clever st	adents concen	trated upon?	-
			Yes	No	Key	
	1.		3	17	No	
	2.		1	19	No	
	3.		3	16	No	
	4.		1	9	No.	
	5.		2	7	No	
	6.		6	4	Yes	
		than	neglected	19		
•	17 02 0	omo?	Yes	No	Key	
	1.		20	dilate.	Yes	
	2.		ĩ	19	No	
	3.		3	16	No	
	4.			10	No	
	5.			8	No	
	0.			9	24.0	
	6.	nt Ev	1 ents Grou	1	9	9 No
	Clas	s Ins	truction :	in Current Ev	ents by teach	er -

XIII

1.	Class	Instruction	n in	Curren	t Events	bу	teacher	(800
		Ye		No		Key		
	1.	16		4		No		
	2.	£		15		No		
	3.	1.7		2		Tes	3	
	4.			5		Yes	3	
	5.	9)	1		Tes	3	
	6.	2		8		Yes		
2.	Studer	t reports	in 0	urrent	Events -			
		Ye		No		Key	_	
	1.			18		No		
	2.	:		18		No		
	3.	2		16		No		
	4.			7		No		
	5.	4		6		Te	3	
	6.			8		No		



3. Number of periodicals in Current Events available -

		_						Koy
1.	0-10 6 within	1	of	Key,	7	said	0	4
			16	**				1
3.	0-20 8 "	12	6.6	12				3
4.	0 all were 0							0
5.	all 0							1
6.	0-6 none near							12

Censoring the Questionnaire. As a result of the application of the four criteria described in Chapter III, a fairly definite estimate of the validity and reliability of the various items was secured. This formed the basis on which the questionnaire was censored. The following classification of items was then made.

TABLE XI
CLASSIFICATION OF ITEMS OF QUESTIONNAIRE

Group	Entirely trust- worthy items.	Fairly trust- worthy items.	Completely un trustworthy items.
Gen.	1.2.3.		
I	1.3.5.7.9.10.	2.4.8.	6.11.13
ıı	1.2.3.4.9.11.	5.6.7.8.10.	14.15.
III	3.4.5.6.8.	1.2.7.	
IV	2.3.5	1.	4.
V	1.		2.
AI	1.2.4.		3 .
AII	2.5.6.8.	1.3.7.	3.
VIII	2.4.5.6.7.	1.3.	
IX	1.2.3.5.	4.	6.



Table XI - continued.

Group	Entirely trust- worthy items.	Fairly trust- worthy items.	Completely un- trustworthy items.
x	2.3.4.	1.	
xı	1.3.	2.	
XII	2.3.4.	1.	
XIII	2	1.3.	

It is well to note at this juncture that the methods adopted for measuring the validity and reliability of the questionnaire items are not absolute. There are many items where an apparent reliability is spurious, and the results deceptive. In the item dealing with Objective Tests, for example, one cannot but feel that many students did not know what Objective Tests were. The teacher may never have used them. Possibly she used them but referred to them as New Type examinations or tests. In cases such as this, seeming reliability in the answers must be deceiving.

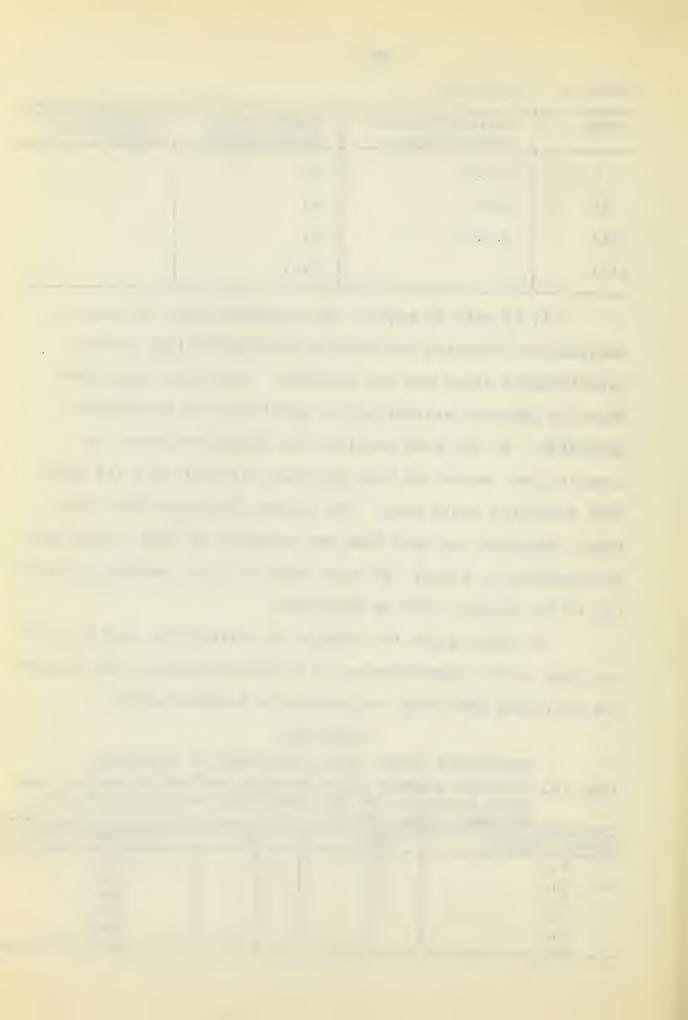
In other cases the absence of reliability does not rob the item of its significance, as is demonstrated in the case of the following item from the methods of teaching group.

TABLE XII

UNRELIABLE ITEMS WHICH ARE WORTHY OF RETENTION

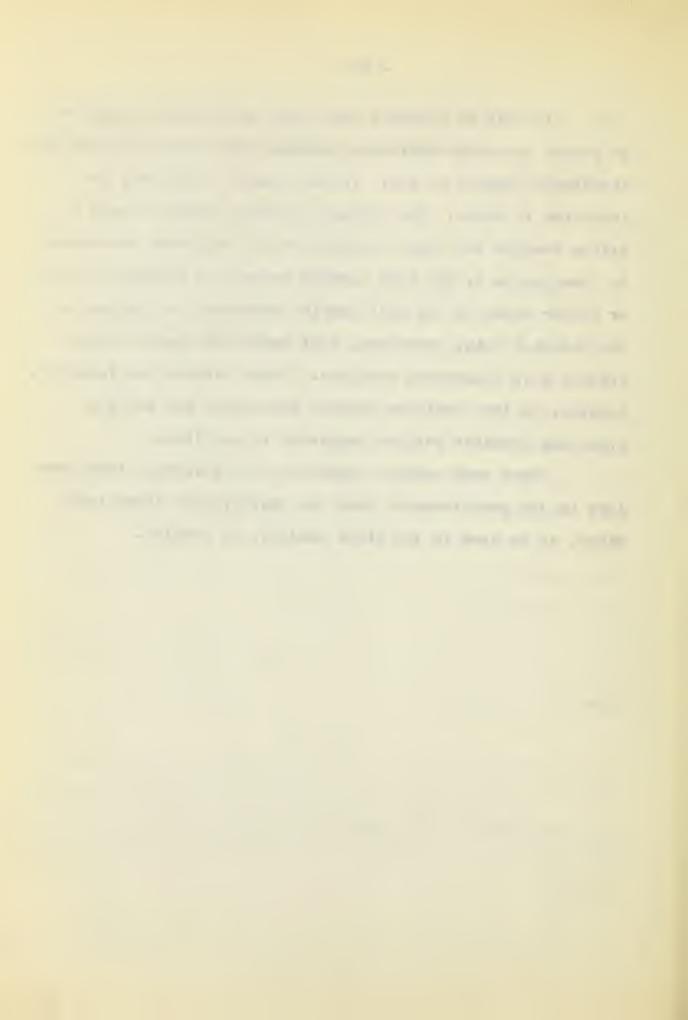
Item 10. "Did the teacher place a brief outline of the material being presented on the blackboard as the lesson pro-

Control Group	Yes	No	Teacher's Key
1.	20	0	Yes
2.	10	8	Yes
3.	15	5	Yes
4.	9	1	Yes
5.	6	3	Yes
6.	9	1	Yes



It will be observed that here the students seemed to be unable to decide definitely whether the teacher did use the blackboard outline or not. To the teacher of History the situation is clear. The students probably found it hard to decide whether the type of outline which they were accustomed to, ranging as it did from scrappy records of difficult words or proper names to the most complex summaries or synopses of the material being presented, fell under the general classification of blackboard outlines. Their answers are valuable, however, as they indicate clearly that there was not the clear and definite outline suggested in the item.

Where such answers appeared to be valuable, they were left in the questionnaire when the censoring of items took place, to be used in the final analysis of results.



CHAPTER V

THE GENERAL OR INTRODUCTORY GROUP

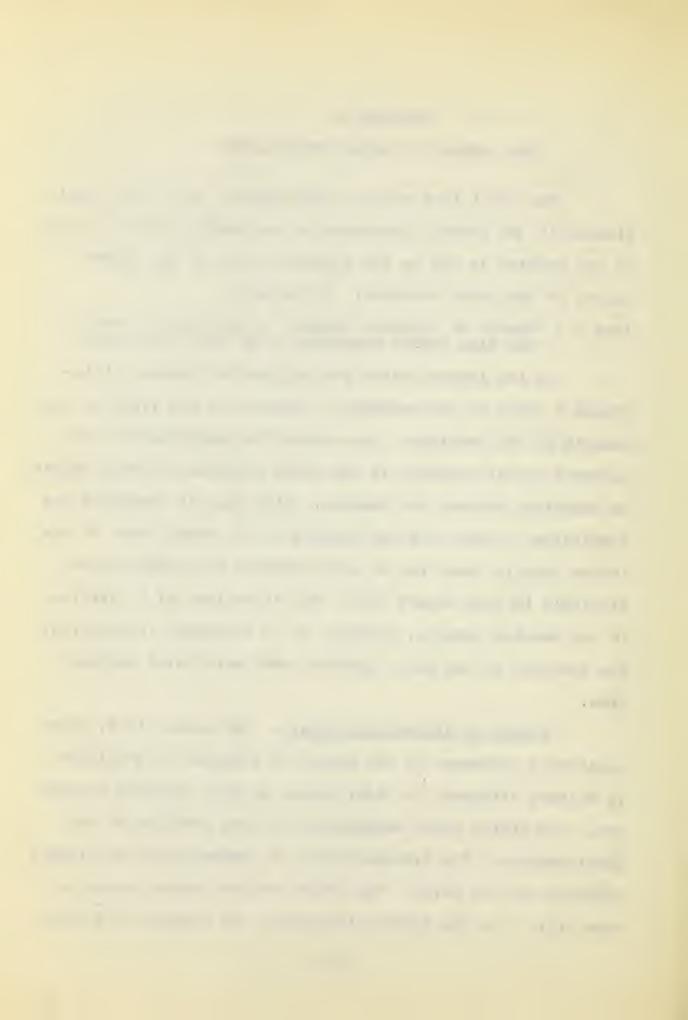
The first item on the questionnaire has little significance in the formal discussion of the results of this study.

It was drafted to aid in the classification of the answer
sheets as they were received. It follows:

Item 1 .- "Number of teachers engaged in High School work in the High School attended: 1; 2; 3-5; 6-or more."

As the investigation was originally planned, it included a study of the teaching of History in all types of high schools in the Province. As a result the questionnaire was answered by all students in the three Provincial Normal Schools in Edmonton, Calgary and Camrose. Time has not permitted the completion of more than one portion of the study, that of the larger schools where six or more teachers are employed exclusively in high school work. The situation, as it obtains in the smaller schools, promises to be intensely interesting. The analysis of the data, however, must wait until another time.

Number of Students in Class.— The second item, which requires a statement of the number of students in the class in History attended, is significant, as many teachers pointed out, when giving their suggestions for the revision of the questionnaire. The average number of students, in the classes reported on, was 39.33. The range was from below twenty to over fifty. As the average indicates, the classes were over-



ployed were affected. One of the most experienced instructors in History, in answering the letter requesting her opinion of the second draft of the questionnaire, suggested that the large number of students in her classes made it impossible to do more than concentrate upon the weaker ones, if the good results, which school boards demand on Departmental Examinations, were to be obtained.

This statement is of tremendous importance to this investigation. We are primarily concerned, not with what should go on, but with what actually does take place in the History classroom, under the working conditions which ordinarily prevail. We must take for granted, on the basis of the discovered information, that the History classroom is crowded, and must endeavor to detect the influence of this overcrowding upon the methods and procedures employed by the teachers.

This also suggests that the questionnaire is attempting a worth while piece of work in searching out the procedures
in the classroom as they are, rather than attempting to discover ideal methods and devices which must be impossible under
such unfavorable conditions.

The Affectivity Factor. The third item of the General Group of the questionnaire has already been used in the validation of the results of the entire study. It is, as has been stated, a device for interpreting and measuring the influence of the emotional reaction of the student, both to the subject



of History and to the teacher. The final results are intrinsically interesting. The item, and the graphical representation of the results follow.

Item 3.- "Indicate your enjoyment of your year's work in History as fairly as you can on this scale: Negligible; Slight; Average; Pleasant; Most Enjoyable."



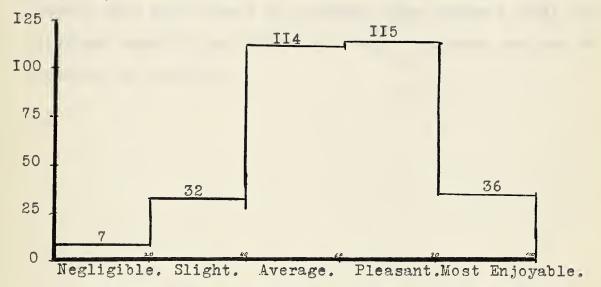


Fig. 1. - Students' Emotional Reaction to History.

The results, as depicted in the above histogram, are pleasing. They observe a normal distribution reasonably well, but the inclination or trend is overwhelmingly in the direction of a liking for the subject. This is a very complimentary and pleasing discovery, from the standpoint of the teachers of History in the larger schools. It would be interesting to find out the exact reaction to the other subjects of the high school curriculum. One feels that History would not suffer greatly by comparison.

It may be contended that these results have little significance, due, possibly, to the fact that the instructors



in History in the three Normal Schools were present when the questionnaires were answered, and may have unconsciously affected the results. When it is remembered that each questionnaire was, in effect, anonymous, and that the students had been away from their high school environment for over six months when they answered this item, it is reasonable to assume that the answers as recorded above reflect their true attitude towards the subject and their teachers, and can be regarded as reliable.



CHAPTER VI

METHODS OF TEACHING

Distribution of Time in the Recitation Period. - Much has been written on the important subject of the distribution of time in the ordinary History recitation. Opinions vary greatly as to the best practice in the allotment of time for teaching, text book study, class discussion, and for preliminary and concluding reviews. The questionnaire results reveal the fact that the average period has a length of thirty-five minutes precisely. How this time has been distributed among the various legitimate recitation activities mentioned above is shown clearly in the series of histograms or column diagrams which follow.



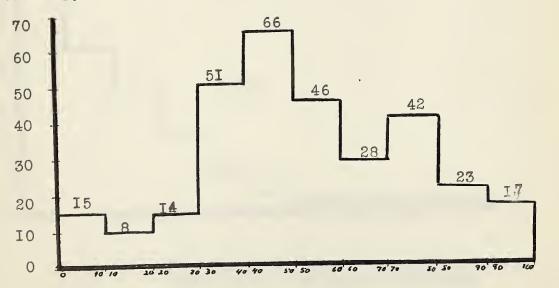
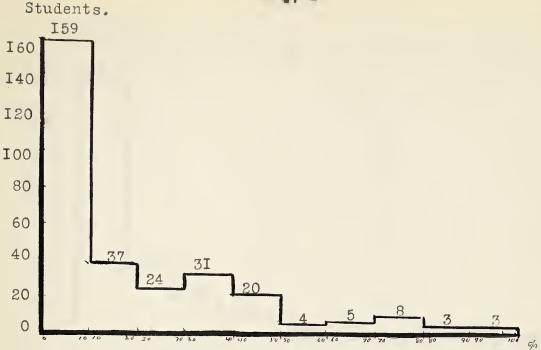


Fig. 2. - Percentage of Teaching Time in the Average History Period.

%





Students.
Fig. 3. - Percentage of Average History Period
Used for Text Book Study.

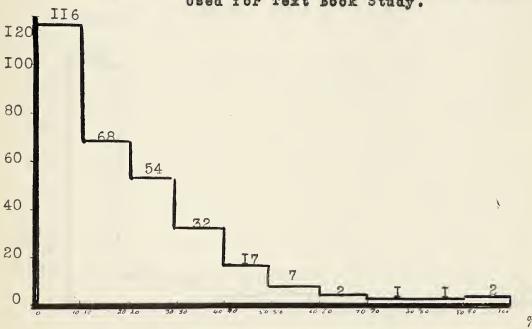


Fig. 4. - Percentage of Time of Average History Period Used for Class Discussion.



Students.

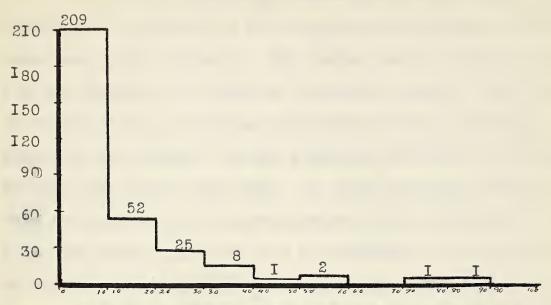


Fig. 5. - Percentage of Average History Period Used for Preliminary Review.

%

%

Students.

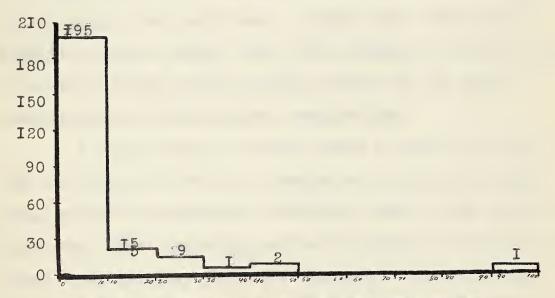


Fig. 6. - Percentage of Average History Period Used for Concluding Review.



The first significant observation is that the time utilized for teaching in the average period has been reduced more than seems necessary. The median for the teaching time for the Province is 50.22% of the entire period. The medians of the other four customary activities of the recitation period do not account for the remaining 49.78% of the period. To what use is this time put? It seems entirely probable. from the results of the next section of the investigation, the Note Book Group, that the time is consumed in the construction of notes. The desirability of this will be discussed in that section. All that need be said here is that too little of the recitation period seems to be utilized for straightforward teaching of History. The obvious explanation of this situation is that, with the omnipresent concern about examination results, teachers divert time from teaching to other avenues of activity which promise better returns in the form of successes on the Departmental Examinations.

A satisfactory situation seems to exist in regard to the time spent in review. A median of 7.15% of the time being spent in preliminary reviewing, seems a very satisfactory allotment. The concluding review of 5.71% of the entire time seems brief enough. Evidently reviewing is not the time-consuming factor it has been judged in the past.

The median for the time consumed in text book study 18 9.25%. Practice varies in regard to the use of the text book, but whether one favors its use or not, the evidence is

that the text book type of teaching is not being indulged in to any too great extent in this Province.

An exceedingly pleasant discovery is shown in the median for the time utilised in class discussion. 15.00% of the period is a higher estimate than one might have expected in a system so insistent on results on examinations. It is a tribute to the teachers that class discussion has taken a place second in importance only to teaching, in the time distribution.

The Blackboard Outline. The device of the black-board outline can be defended psychologically and pedagog-ically. It is gratifying to note the extent to which it is used. The item which refers to it, and the results secured follow.

Item 10.- "Did the teacher place a brief outline of the material being presented on the blackboard as the lesson progressed? Yes. No."

The reaction of the students is expressed in the following linear graph.



Fig. 7. - Use of Blackboard Outline by Teacher.

The teachers appear to have used it widely, yet it seems that a greater number of teachers than is indicated by the answers of the 66.56% of the students could have used this excellent device.

Aids in Teaching. - The subject of History places a heavy burden on the teacher. He must present lengthy and



detailed masses of information to his students. How is he to recall this information when before his class? He may use no aid, trusting to a thorough knowledge of the subject; he may use lecture notes, referring to them when a fact or idea has slipped his memory; or he may refer to the text when some detail eludes him. Teachers vary greatly in their attitude to this question.

An item on this problem was inserted into the question-

Item 11.- "Did the teacher usually teach from or refer to when teaching: 1. The Text. 2. Lecture Notes.

5. No Aid."

The control group summary, however, exhibited such startling disagreement between the students' opinions and the teacher's verdict, that the data so gained was deemed valueless. The students, in other words, did not know which method was used by their teacher. This suggests that the teacher, consciously or unconsciously, concealed whatever aid was used.

A little straightforward thinking on this subject should develop a proper attitude of mind. In no subject in the secondary schools is it so desirable as in History that the instructor furnish the students with material which is fresh, interesting and colorful, and ranging far beyond the text. The presentation of the important facts alone will never cause a class to enjoy the subject. To gather this material requires many, many hours of exacting labor. Retention of it, in its entirety, with its quotations, speeches,



and references, is almost impossible. Nor need the teacher feel that the presence of lecture notes on his desk is necessarily a sign of poor preparation. If referred to in moderation, for the occasional fact which is forgotten, or for a statement or quotation which it is uneconomic to memorize, there should be no consciousness of using an unsatisfactory device.

The evidence, however, of the students in the control group, and even of the teachers in their answer keys, was to the effect that reference to the text or the use of no aid whatever were commoner practices than the use of lecture notes.

The Topic Covered in the Teaching Period. - A common criticism of History teaching is that the recitation period is not designed to cover a definite topic. Instead the teacher merely progresses as far as time permits. The following item was designed to secure information on this point.

Item 12.- "Did the teacher cover a definite topic or unit of material in each teaching period? Yes. No."

The verdict of the students was as is represented in the linear graph which follows.



Fig. 8. - Teaching of Complete Topic in Each Period.

The control group results indicate that the answers to this question are highly reliable. This would seem to show that the time-honored habit of progressing as far as time permits in



the History presentation, with its consequent carelessness in planning the teaching of each topic, has largely disappeared from the teaching of History, in our larger secondary schools.



CHAPTER VII

THE HISTORY NOTE BOOK

The Problem. The note book has become one of the most controversial problems in the teaching of History in secondary schools. The value of note books, the manner in which they should be prepared, and the part played by the student and teacher in their preparation are aspects of the problem. Fifteen items on this topic were introduced into the question-naire. While items 14 and 15 were deleted as unreliable, valuable information has been gained from the remaining thirteen.

Were Note Books Prepared during the School Year? This question was the first item in the Note Book Group. It resulted in the information that 95.82% of the students had composed such note books. Depicting the results graphically, the popularity of this device becomes apparent.



Fig. 9. - Extent to which History Note Books were Prepared.

The results are startling. It suggests that the note book is in almost as common use as the text itself. Indeed, for purposes of review, it has often been stated that the note book has almost superseded the text. If so much importance



is attached to this device, it becomes interesting to find out precisely how the note book was composed, and exactly what material was included in it. The first item which concerned itself with this subject follows, accompanied with the histogram representing the information secured.

Item 2.- "What percentage of the History for the year did they cover? Underline the nearest percentage.

0%: 20%:40%:60%:80%:100%."

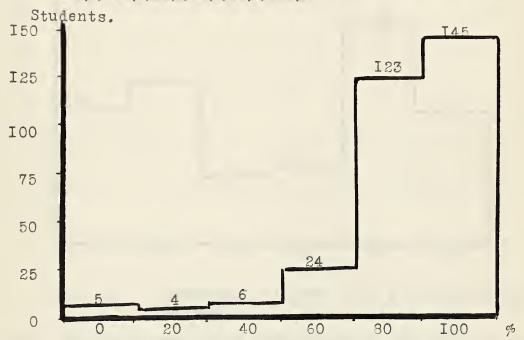


Fig. 10. - Percentage of the Year's Work in History Included in Note Book.

47.23% of the students made notes on the entire course in History covered during the year, while 67.29 found their nearest percentage of the work included in the note book in the vicinity of 80% or above. This is sufficient indication of the importance placed on notes by the teachers.

the Authorship of the History Note Book. The authorship of the notes included in the History note book is our
next matter for concern. The following items and their results



indicate the extent to which the teacher was responsible, whether by dictation of notes or writing them on the board, and also the students' share in their construction.

Item 5.- "Approximately what percentage of the note book was dictated by the teacher? 0%; 20%; 40%; 60%; 80%; 100%."

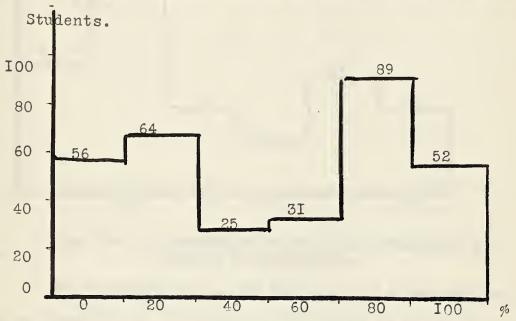


Fig. 11. - Percentage of Note Book Dictated by the Teacher.

Item 6.- "Approximately what percentage of the note book was written on the board by the teacher? 0%; 20%; 40%; 125- 60%; 80%; 100%."

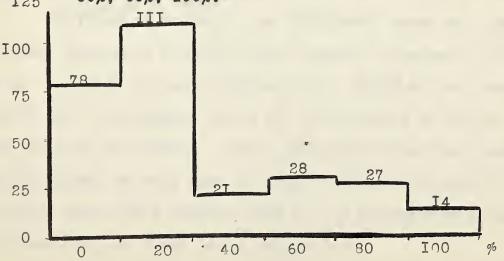


Fig. 12. - Percentage of Note Book Written on Board by Teacher.



Item 8.- "Approximately what percentage of the note book was entirely of student construction? 0%; 20%; 40%; 60%; 80%; 100%."

Students.

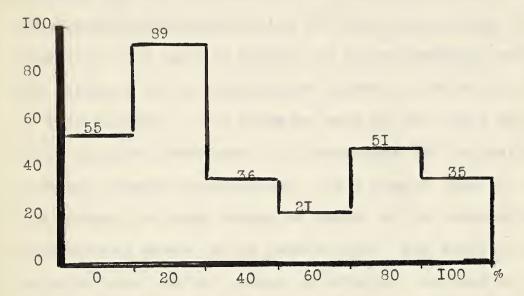


Fig. 13. - Percentage of Note Book Entirely of Student Construction.

Our conclusions on the basis of this information are rather interesting. Apparently dictation of notes by the teacher is a popular practice, 54.26% of the students having selected 60% or over as an indication of the portion of their note book which came from this source.

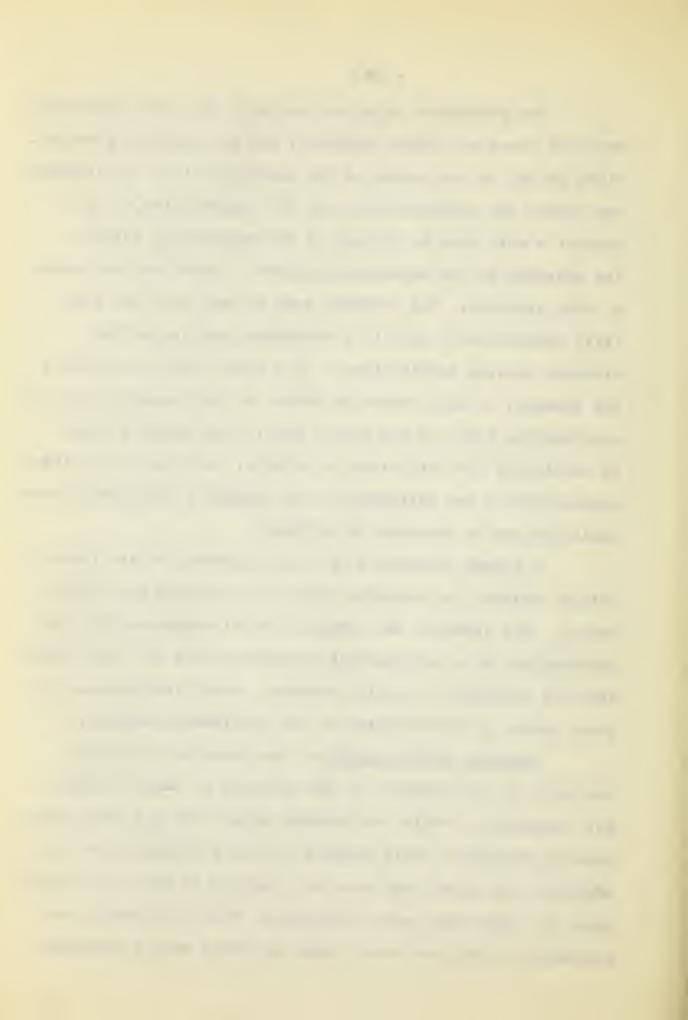
writing of notes on the blackboard does not seem such a common practice, although some teachers apparently tried to do this with the entire note book. 41.3% of the students record that the teacher wrote in the vicinity of 20% of the note book on the board. Figure 13 reveals that the students were required to make some of their own notes in most cases, although there were actually 20% of the students who did not make over 10% of their notes in History.



The inferences which one may draw from the information depicted above are rather definite, and not entirely pleasing. First of all we are forced to the conclusion that the teachers are taking the responsibility for the construction of the student's note book in History to an overwhelming extent. The pressure of the examination system is doubtless the cause of this attitude. The teachers seem to feel that the carefully prepared note book is a tremendous aid in getting students through examinations. As a result they are robbing the student, to some extent at least, of the educative task of constructing notes on the year's work. The teachers cannot be criticized for this state of affairs. As long as the final examination is the criterion of the teacher's efficiency, this condition may be expected to continue.

A second conclusion in this department of the investigation concerns the teaching time of the average recitation
period. The students and teachers are so concerned with the
construction of a satisfactory note book, that the time available for teaching is greatly reduced. Pupil development, in
other words, is subordinated to the examination machine.

Checking of Note Books. The notes were checked regularly by the teacher, in the majority of cases, though not frequently. While the students admit that the notes were checked regularly, their answers to Item 10 suggest that in 20.20% of the cases they were not required to make any alterations in their note books afterwards. This is probably explainable by the fact that, since the notes were constructed



by the teacher, little change was necessary.

A final discovery, resulting from Items 12 and 13, was that the notes were usually not in essay form, but consisted rather of main headings and tabulated subordinate headings. This is doubtless the best form of notes to be used in review for examinations.



CHAPTER VIII

METHODS OF STUDY AND REVIEW

The Regularity with which Students Study. The mastery of the facts and inferences of a unit of History by their students is the ideal which teachers strive for. It is a difficult ideal to attain. There are so many and varied types of material, ranging from basic principles to trivial details, and from highly organized and systematic bodies of information to utterly isolated and unrelated facts.

In order to investigate the methods of study used in our secondary schools, there have been two sections of the questionnaire drafted to secure the necessary information.

The Methods of Study Group covers the problem from the student's standpoint, while the Review Group deals with the teacher's organization of the study program.

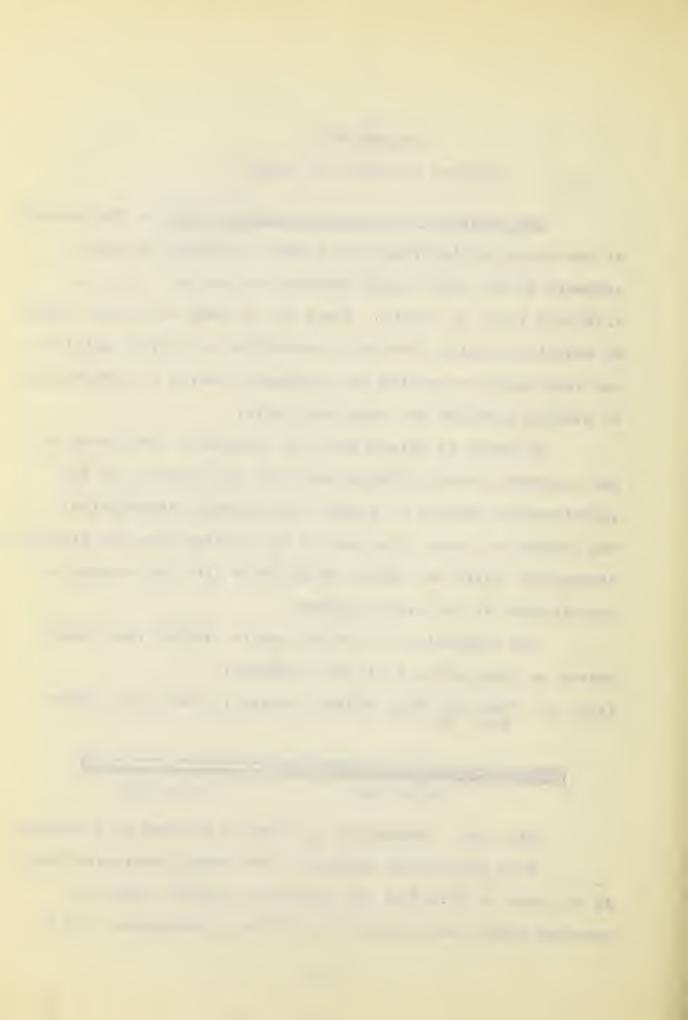
The regularity with which pupils studied their work proved an interesting topic for research.

Item. 1.- "Did you study History regularly during the year?
Yes. No."



Fig. 14. - Regularity of Study of History by Students.

This information amounts to the candid admission that,
in the case of 38.96% of the students, careful study was
deferred until the vicinity of the final examination. As a



matter of fact, realizing the emphasis on results on the finals, one wonders that the above percentage was as low as recorded.

When questioned directly on whether they resorted to "cramming" for the final examinations, the following information was secured.



Fig. 15. - Was "Cramming" Resorted to by Students?

56.6% of the students admitted to "cramming", while

43.4% denied it. To those who are unfamiliar with the term,
an explanation is due. "Cramming" is the gentle process
whereby study is postponed until the last few weeks before the
final examination, at which time the students commence to work
day and night, memorizing vast quantities of information which
is retained until the Departmental Examination, and then forgotten as speedily as possible. Since there has been no
time for overlearning, no association with, or relating of the
information to, the former furnishings of the mind, and no
sustained reviewing over a period of time, it is improbable
that the process of forgetting will be delayed.

To say that this is a heinous process is stating the case mildly. It is a practice which results in students taking four years of History in high schools, and forgetting most of what they have learned, before they have been graduated a full year. As far as they are concerned, in after life, they might



just as well not have taken any, so speedily and thoroughly have they forgotten it. The desirable alternative is, of course, regular and thorough study throughout the year. This alone can give anything resembling permanent retention.

Do the teachers know that this is a common method of study? Certainly, though it must be understood that they try to discourage it as much as possible. The students in this Province are past masters, when they leave high school, in "getting through" examinations. They know that work at the end of the year will give them sufficient information to pass the examination in History. Why should they not have a pleasant and easy time during the year, and "cram" for the finals? is another evil result which can be placed at the door of the present examination system. Surely it would be possible to take the teacher's judgment of a student's proficiency in the subject as a basis for promotion in some of the high school units, or at least allow the teacher some share in the decision, instead of making the examination the final criterion of the attainment of the student in the subject. Only by some reform of this kind will the practice of "cramming" be avoided, and the farcical nature of "learning" a course in History in two or three short weeks be ended.

Study before Term Examinations. - A healthier discovery was made in regard to study for term examinations, in the following item from the Methods of Study Group.

Item 5.- "Did you study carefully before the term examinations set and corrected by the teacher? Yes. No."

-

70.3% of the students claim that they studied before these tests, while 29.7% admitted that they did not. This is a comforting finding. If the students ever realized, early in their high school career, that they could "cram" the material at the end of the year, they might easily learn to scoff at term tests, and to ignore the low marks which their teachers might give them, complacent in the knowledge that they could fail on teachers' tests and pass on the final examination. It is probably a tribute to the teachers' influence that this excellent attitude towards term tests exists.

The Reviewing Program. The accepted practice in reviewing, theoretically at least, is to supplement the short daily reviews by regular review classes, when the material taught in a series of lessons is reorganized and reviewed with a view to facilitating learning. The exact function of the review class is the reviewing and reorganization of large masses of material in the form in which the students will have to recall it for examinations in after life. There is a vital need for classes devoted exclusively to review.

The practice in Alberta schools does not bear out this statement, in any great degree. Only 60.04% of the students reported that they had such review classes, while 39.96% indicated that they were dependent on the review at the beginning and conclusion of the ordinary recitation. This finding suggests that the teachers have not recognized the need for review periods of this type. This is surprising in a Province where examination results are prized so highly.



The Nature of the Review. The type of question used in oral reviewing is important. The results of the items which dealt with questioning were generally satisfactory. 73.7% of the students reported that the review questions asked in class were not answerable by isolated facts. Instead, organized bodies of facts, and reasoned conclusions were demanded. This is accepted as the superior procedure. It places review work in History largely in the realm of reasoning and judgment, rather than that of drill on isolated facts, which is sometimes encountered.

Another pleasing result came from Items 4 and 5. The facts which the teachers referred to in their questions were of vital importance, as the answers of 90.7% of the students bear evidence. Emphasis was not placed on trivial or valueless facts frequently, as only 9.3% of the students placed themselves on record as having had this experience.

The Final Review. The examinations conducted by the Department of Education hold a position of great importance in the minds of teachers and students alike. Since they constitute the criterion which establishes or destroys a teacher's reputation, the children are prepared most carefully for them. The usual means utilized for the preparation of the students for these examinations, other than the ordinary procedures of the classroom, is the final review. 76.9% of the students reported that the teaching was not continued up to the finals. On the contrary many teachers ended their teaching program early, to provide for several weeks of concentrated reviewing.



The following column diagram shows the number of weeks used for the final review in the various secondary schools of the Province.

Students.

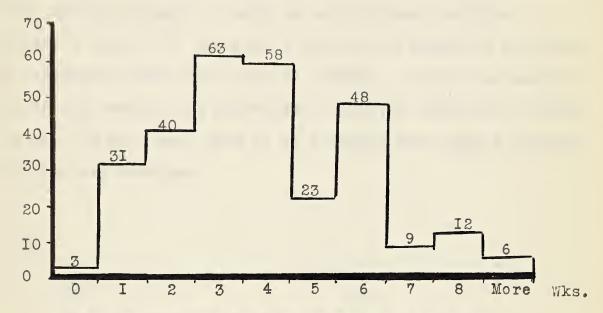


Fig. 16. - Length of Review Before the Final Examination.

According to this evidence it would appear that a period of from three to four weeks is the popular length of the review period. 41.7% of the students report having had this length of time for the final review.

This is not an exorbitant period for review. It does become exorbitant when two or more months of the school year are used for this purpose, with a resultant reduction of the teaching program. Then, the teaching cannot but be hasty, and the material presented scanty in quantity or lacking in quality. On the whole, the results of this item are highly satisfactory.

The method of procedure during this final review of the year's work is interesting. The information gathered reveals that 89% of the students were trained in answering old

examination questions, as preparation for their own final examination. Again, we note the tremendous care which is exercised by the teachers in preparing their students for this final annual judgment. Again we see evidence that the educative aspects of the year's work are disregarded in favor of procedures which will improve results. Surely the answering of old examination questions has little educational value, and yet, we have seen that it is a device used almost universally in this Province.



CHAPTER IX

WRITTEN AND GRAPHICAL EXERCISES

The Written and Graphical Assignment. The bulk of the work done by the student of History during the year takes the form of written or graphical exercises. In the field of written exercises come the essays, notes, comparisons, analyses, or other written work which may be required. In the field of graphical assignments we have the maps, charts, diagrams and graphs which the teacher may demand. Two groups of items were designed to study this aspect of the year's work in this subject. We shall first consider the various findings in regard to written exercises.

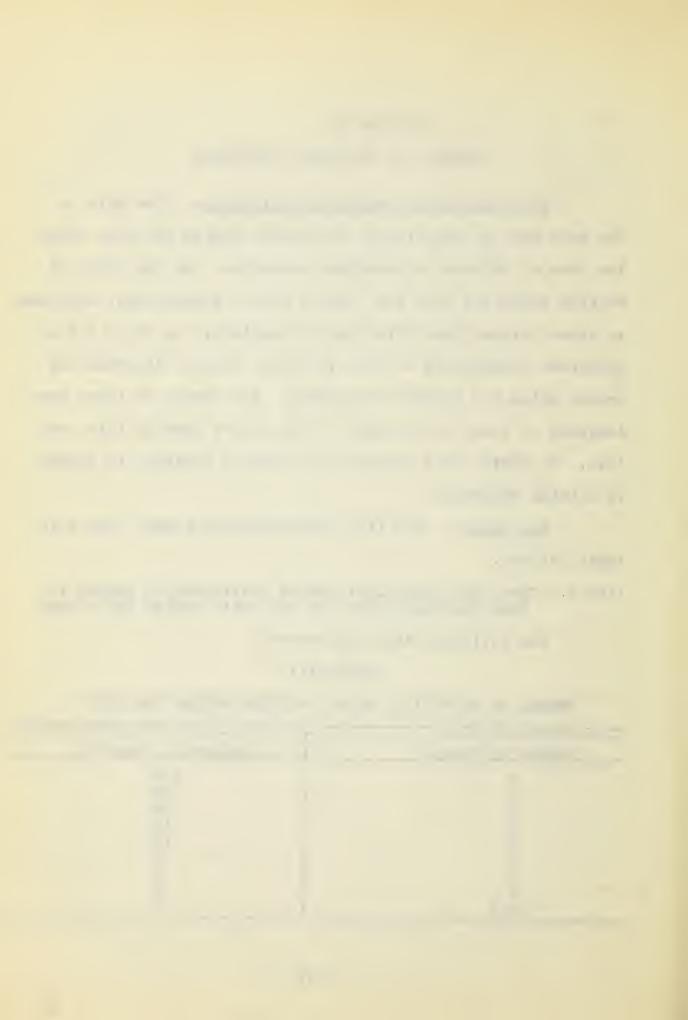
The Essay. - The item which concerns itself with this topic follows.

Item 1.- "How many historical essays equivalent in length to four foolscap pages did you write during the year?"

The following data was secured.

TABLE XIII
WUMBER OF HISTORICAL ESSAYS WRITTEN DURING THE YEAR

Number of Essays	Number of Students
0	135
1	20
2	40
3	13
4	14
5	5
6	4
7	1
More	5



This information leads us to the conclusion that the long historical essay is not in common use as an assignment in secondary schools. Its value may well be questioned, since it involves a large amount of work on a single topic or aspect of History. It is, however, one of the best types of training in the organization and manipulation of historical material. The fact that 185 students, or 64.8% of the students who answered, did not write a single essay of this type seems significant. It suggests that the essay has ceased to be a standard technique in secondary schools in the study of History. No harm probably results where there are sufficient short exercises involving the same type of training. The next item bears out this conclusion.

Item 2 .- "Were short exercises the chief written work in History? Yes. No."

78.4% of the students admitted that this was the case. This finding bears out the idea that the short exercise has replaced the historical essay. The ease with which the short exercise can be assigned, the large number of topics which can be covered, and the speed of marking seem to be the reasons for the general use of this type of written work.

Number of Exercises Given During the Year. - An interesting body of information resulted from an item asking for the number of short exercises assigned per month. The item, and the answers received, represented by a histogram, follow.

Item 3.- "Approximately how many of these were required per month?"

Students.

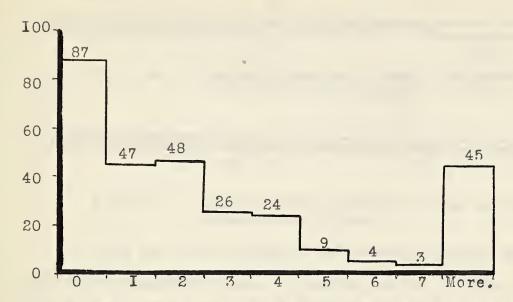
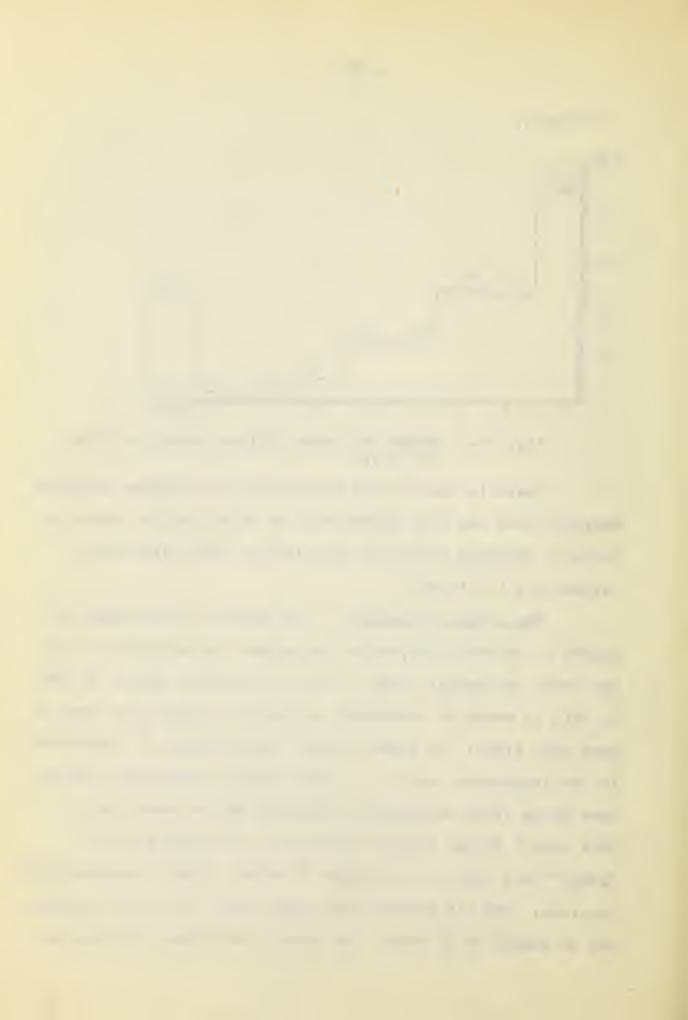


Fig. 17. - Number of Short Written Exercises Given per Month.

There is such a wide variation in the number assigned monthly, that one must infer that the short written exercise is not a standard device in the minds of most high school instructors in History.

The Study Assignment. The absence of agreement in regard to written assignments suggested the possibility that the study assignment might be the most popular device in use. By this is meant an assignment of pages or topics for home or seat work study. In items 3 and 5 this problem is considered. It was discovered that out of 309 students answering, 245 had been given study assignments regularly before each class. This result raised the old question - do students really "study" when such an assignment is made? Item 5 answered this question. 194 did perform such tasks when they were assigned, and 89 failed to do them. The results of these two items are



portrayed graphically below.



Fig. 18. - Students Receiving Study Assignments Regularly Before Class.

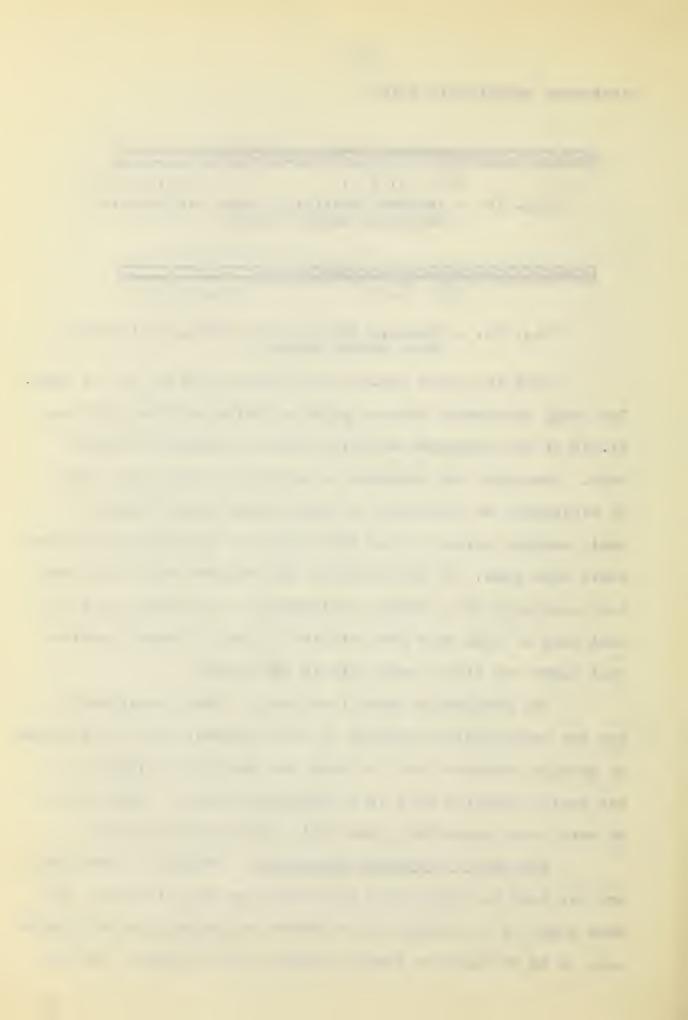


Fig. 19. - Students who Performed Study Assignments Given Before Class.

From the above results two generalizations may be made. The study assignment seems a popular device in this Province. 79.31% of the students admitting that it was used in their case. Secondly, the students do not seem to take this type of assignment as seriously as they should, since 31.4% of their answers revealed that they failed to execute such assignments when made. Of the 68.6% of the students who state that they completed such "study" assignments, one cannot but feel that many of them must have studied in such a casual fashion that there was little real gain in knowledge.

The conclusion seems inevitable. Study assignments are not sufficiently concrete in their demands upon the students to justify extensive use, as they are too easily evaded, or too easily complied with in a desultory fashion. They seem to be used more extensively than their value would justify.

The Use of Graphical Exercises. - Graphical exercises are not used as extensively in History as they might be. In some cases it is because the teachers are unfamiliar with their use, as in the case of charts, graphs, and diagrams. On the



other hand, the map is a most familiar device, and one might expect to find it in extensive use.

How Many Maps are Drawn by the Students in a Year?Information on this topic was desired. The item and column
diagram representing the results secured follow.

Item 1.- "Give approximately the number of maps you were required to complete during your year's work in History."

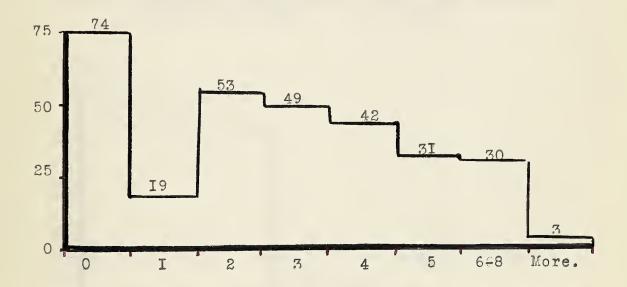


Fig. 20. - Number of Historical Maps Completed by each Student During Year.

The results indicate that maps have been in fairly general use, though in no case was there an ambitious program of map construction. The most significant information gained from the above distribution is the fact that 26.3% of the students who answered this item did not draw a single historical map during the entire year.

The inference which must be drawn is that map work has fallen on evil days, and that, as a consequence, students are

not required to be familiar with exact locations or situations of the historical events which they study.

The Time Required to Draw a Map. The reason for the lack of popularity of map drawing is hard to find. It was felt that the time required to draw a map might be the greatest obstacle. The results of item 5 given below dismiss this possible solution.

Item 5.- "How much time on the average was required to complete one map? min."

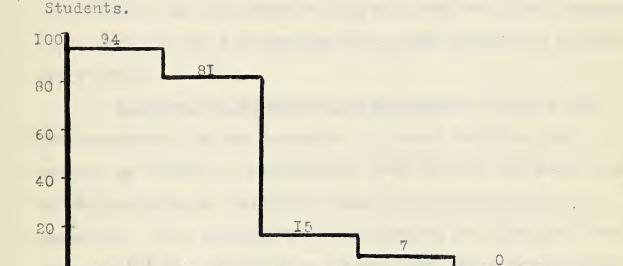


Fig. 21. - Time Required to Complete Map.

45 -

60

More.

Min.

30 - 45

I5 - 30

I5

0

0

Thus one gathers that the time factor is not the impediment to map construction it might have been supposed. The data above indicates that there are very few students indeed who spend more than half an hour in drawing a map. while 47.7% of the students completed maps in fifteen minutes or less. The reason for the lack of popularity of map drawing must be sought elsewhere.



Another theory is that the maps drawn tend to be too elaborate. There is the danger that time will be wasted in coloring them, and in careful printing of names of places.

Even if the time factor suggested that this was the case, we have the evidence that it is untrue.

Item 4.- "Were they (the maps) usually: 1. Colored.
2. Black and White?"

The results show that out of 243 students only 17 colored a map in the work of this unit. This seems excellent practice, as much time has been utterly wasted by too close attention to the appearance of the map, and too little concern about what aid the map exercise was to the student in learning his History.

Reasons for the Neglect of Map Work. Why are maps not constructed by the students? It seems that the real reason, by process of elimination, must be that the maps drawn by the students are worthless since their outlines are inaccurate. It is evident that the teachers are convinced that there is little profit to the student from their construction. What, then, can be done to make the map assignment more useful? The answer seems to be the use of the prepared outline map. The student would be required to locate the places of historical importance, and the developments of historical significance on this outline. The completed map would be accurate, and a minimum of time would be consumed in its construction. Such outlines can be purchased for as little as a cent apiece. They may also be mimeographed or hectographed for a mere fraction of a cent each. Map exercises based on such prepared



outline maps would have almost all of the advantages of ordinary map construction, and none of the disadvantages.

Graphical Devices. As mentioned before, the chart, graph and diagram are not used extensively as assignments in History. This aspect of the work of the students was covered thoroughly by items 6, 7 and 8 of the Maps and Graphical Exercises Group. The following linear graphs indicate the distribution of the answers in each case.

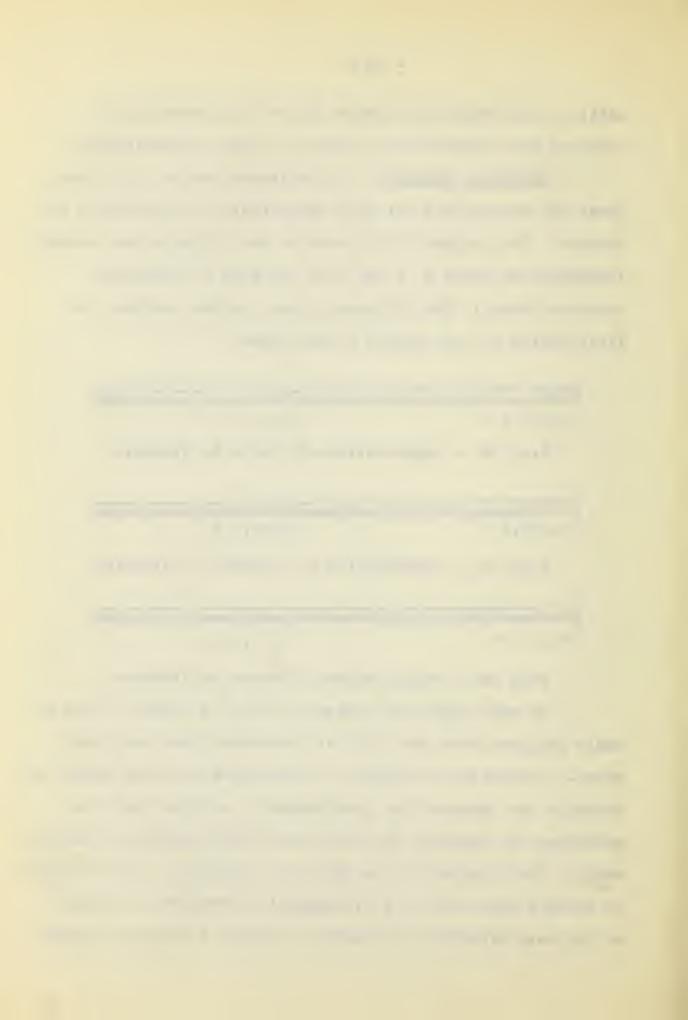
Fig. 22. - Construction of Charts by Students.

Fig. 23. - Construction of Diagrams by Students.



Fig. 24. - Construction of Graphs by Students.

In many cases the students failed to answer. This is ample evidence that they did not understand what the terms meant. Weighting the results to correspond with the number of students who answered the questionnaire, we find that the percentage of students who have used these devices is woefully small. There appears to be only one conclusion. The teachers of History have not, as yet, acquainted themselves with one of the most effective of teaching devices in History - graph-



ical representation. The fault is not with them. These devices have not been taught consistently in Normal Schools, and little has been written about their use. The best illustration of the use of these devices is found in Mr. C. P. Seeley's text on methods in History, although even there the theory underlying their use is not dealt with.

[&]quot;Hints at the Teaching of History" - C. P. Seeley.

Ryerson Press - 1927.

CHAPTER X

TEXT, READINGS AND REFERENCES

The breadth of the reading of a student of History is a measure of his progress in the subject. To probe this aspect of the problem two sets of items were inserted into the questionnaire - the Text Book and the Reading and Reference Groups. We will consider the results of the investigation of text book procedure first.

Adherence to Text Book Order. The order in which topics were taken is not an extremely important feature of History teaching. 74.6% of the students reported that the teacher adhered to the order of topics maintained in the text. while 25.4% of the students indicated that the teacher had made various alterations in the order endorsed by the text. While it is desirable that the teacher should feel free to make such alterations as may seem wise, it is not always necessary to do so. Much can be said for retaining the order followed in the text, at least from the student's standpoint, as confusion is thereby avoided.

What Type of Material is Presented by the Teacher?The following item produced more interesting results.

Item 2.- "Was the material in the text the only material presented to the students by the teacher? Yes.





Fig. 25. - Restriction of Material Presented to that Found in Text.

The results are significant. 43.1% of the students had only the material contained in the text presented to them. In other words many of the teachers felt that it was fruitless to present additional material for interest and color, or for increasing the clearness of the presentation.

large minority who subscribe to this practice. I realize that the criticism will be made that the students are not competent judges of the material presented by the teacher. Let me say that in preparing this questionnaire, this criticism was anticipated, and the reliability of this item checked by an alternative item calling for the opposite information.

Item 3.- "In the majority of lessons was the teacher obviously presenting carefully prepared material gathered from various sources to supplement the material in the text? Yes. No."

The results secured confirm the information gained in Item 2, with slight changes in the numbers. The results follow.



Pig. 26. - Presentation of Materials Secured from other Sources than Text.

This finding tends to show definitely that while the majority of teachers do present carefully prepared material



drawn from many sources, there is a large group of teachers who teach only material secured from the text. This is surprising when one considers that the teachers in question are occupants of positions in the larger schools of the Province, where University graduates are usually found.

A natural inference which may be formed from this evidence is that the teachers have taken the stand, in these cases, that the heavy year's work of the students makes it impossible for them to digest or profit from a larger body of material than is found in the text. The answer to this attitude seems evident. Additional material, if well selected, must add to the clearness of the exposition, increase the interest, and develop a pleasanter attitude towards the subject. To deny the students such material cannot help but result in loss of interest, in drudgery, and to some degree in loss of clearness in the teaching.

The Care with which the Text was Read. - Another interesting problem which relates to text book procedure is investigated in Item 4 of the Reading and Reference Group.

Item 4.- "Did you read your text carefully during the year?

The answers to this item show that 28.4% of the students did not read the text carefully at any time during the school year, while 71.6% of the students admit to having given it reasonably careful study.

It seems surprising that almost 30% of the students could have taken this unit of History, written the final examinations,



and secured their standing, without having studied carefully the text on which the examination was based. To the teacher of History the explanation is not difficult. The students knew their History sufficiently well to pass the examination. They secured their knowledge, however, not from the text but from the note book which former items show to have been constructed largely by the teacher and conveyed to the students either by dictation or by writing the notes on the blackboard.

The only possible comment one might make is that this is exceedingly bad pedagogy, or if not bad pedagogy, certainly bad History. Not only do the students fail to read their texts, but they seem to content themselves by mastering the dry and tedious details which are assembled in their note books and which enable them to pass on the final examination. In fairness to the teacher of History, it must be remembered that the practice is not encouraged by the teacher, but, nevertheless, fear of adverse results, on the final test, results in the adoption of such an inferior procedure. No wonder need be expressed at the fact that many children do not find History interesting, when as large a body as 28.4% of the students who answered the questionnaire studied only such colorless and wearisome material as could be found in the "cramming" note book.

The Number of Reference Books in History Available.To determine whether the students had read widely, the following item was inserted in the Reading and Reference Group of the
questionnaire.

Item 3 .- "How many reference books for additional reading were available in your school?"

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The answers to this item, made by the ninety students of the control groups, were convincing evidence that they had not the slightest idea of the number available. The variation in the answers of the students of the same control group made this obvious. The fact that there was no correspondence between their estimates and the key furnished by the teacher further confirmed this conclusion. The item was discarded.

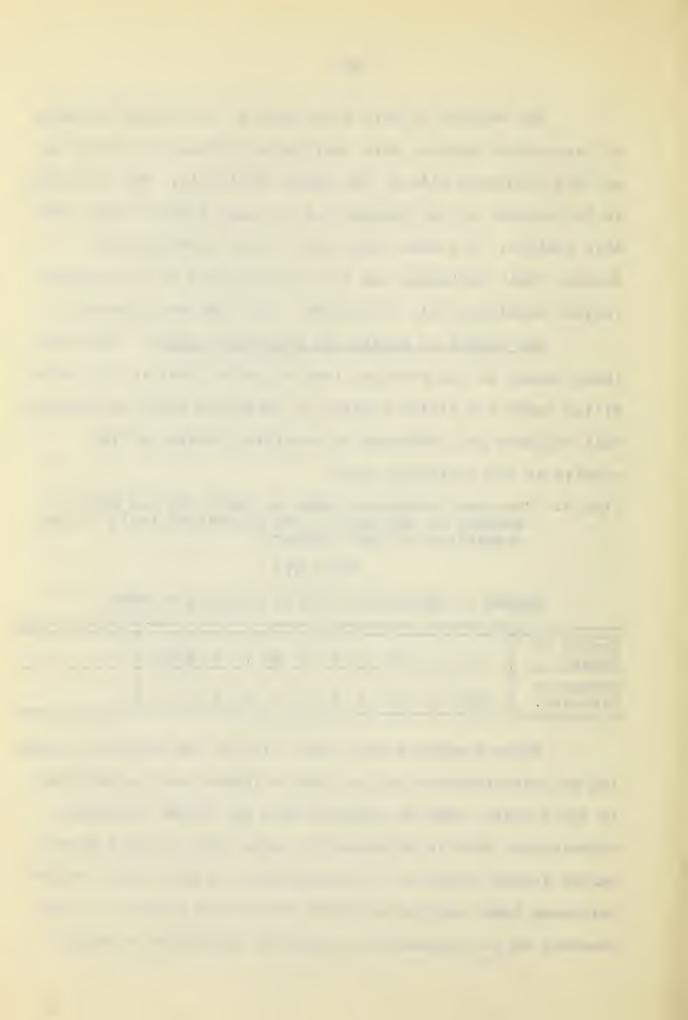
The Extent of Reading of Reference Books. The know-ledge gained in the previous item suggested that in all probability there was little reading of reference books in History. This evidence was confirmed in startling fashion by the results of the following item.

Item 2.- "How many reference books or texts did you read or consult in addition to the prescribed text, at the suggestion of your teacher?"

TABLE XIV
NUMBER OF REFERENCES READ IN ADDITION TO TEXT

Number of Books.	0	1	2	5	4	5	6	7	8	More	
Number of Students.	246	10	16	8	4	2	9	0	0	7	

These results reveal that 78.9% of the students answering the questionnaire had not read a single book in addition
to their text. When we consider that our larger secondary
schools have been in existence for some time, in most cases,
we are forced to one of two conclusions; either there are few
reference books available in our larger high schools, or the
teachers do not recommend or encourage additional reading.



These conclusions suggest that we are in danger of losing sight of an important phase of the study of History.

To train students who are familiar with only one book may produce excellent examination results. To fail, however, to encourage additional reading of material which is in the school building, or to suggest or imply that it is unnecessary, is to lose the opportunity to develop a general knowledge of the subject, and an enjoyment of its content. This cannot be advisable.

The only possible argument which can be advanced in favor of such an attitude is that the students, burdened with preparation for a serious examination, have no time for this type of reading. If this is true the course should be lightened. One cannot but feel, however, that the obvious weakness in outside reading is not so much due to pressure of work on the student, as to over-emphasis of retention of basic facts and neglect to encourage wider reading. This seems to be another paradox of the examination system, wherein the striving for knowledge, as measured by examination results, defeats its very purpose, the gaining of knowledge.



CHAPTER XI

MISCELLANEOUS

1. Examination Technique.

The Number of Examinations in the School Year. - From the discussion of results of the investigation prior to this stage, the reader must have gained the impression that the final examination holds an important place in the minds of teachers and students. In various ways the school year has become a training for the June test. What better preparation could be suggested than frequent examinations during the school year? The following item of the Examination Technique Group was designed to discover the number of such tests which the students had experienced in taking their year's work in History. The results are represented graphically below.

Item 1 .- "How many tests or examinations were held during the entire year, emitting the final examination?"

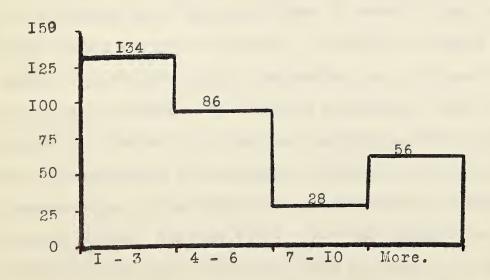


Fig. 27. - Number of Examinations in History During School Year.

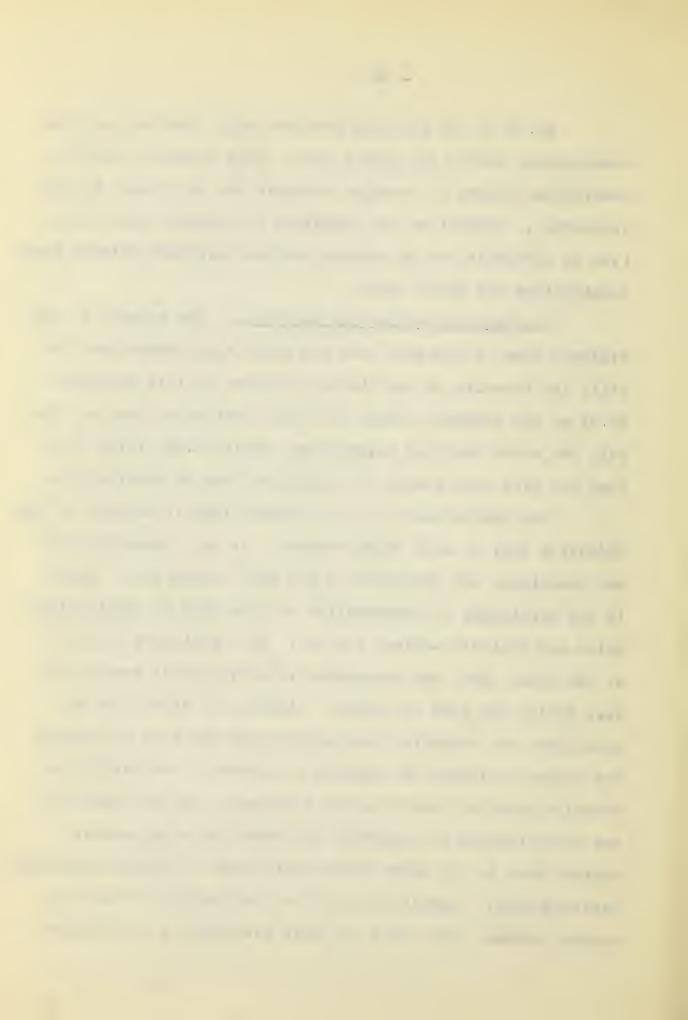


44.1% of the students have had only from one to three examinations during the school year. This suggests that the examination method of training students for the finals is not overworked. Comment on the groupings of students under this item is difficult, as no distinction has been made between long examinations and short tests.

The Type of Examination Employed. The answers of the students seem to indicate that the essay type examination is still the favorite of the History teachers of this Province.

89.8% of the students stated that this variety of test was the only one which they had encountered, while 10.2% stated that they had also experienced the objective type of examination.

The explanation for the apparent lack of support of the objective type of test seems complex. It is a comparatively new technique, and therefore is not used extensively. There is the difficulty of construction of this type of examination, which may militate against its use. The finals are usually of the essay type, and experience in meeting that variety of test during the year is needed. Finally, it might also be urged that the objective examination does not test or measure the highest outcomes of teaching in History - the ability to organize material into reasoned sequences, and the formation and justification of important judgments and conclusions. Whether this is the case or not would seem to require additional investigation. Certain it is, that this variety of test is gaining ground, and, while one does not expect it to replace



the essay variety, it will find its place in at least the informal testing program of the History teacher, in the near future.

2. Student Activity.

Predominance of Teacher Activity. The old gods die hard. Nowhere is this truer than in the classroom. The ageold precept that a teacher must teach is widely accepted in the field of secondary education, though the elementary schools have made marked progress in escaping from this attitude. In History, where a large mass of material is to be presented, the predominance of the teacher in the recitation activity has been particularly marked. The classroom is too frequently a place where the teacher is the "star" performer, giving a polished presentation which is doubtless excellent - for the teacher - while the students sit in bored and lethargic silence. Surely there is little enough that is educative in such a situation. To measure the degree to which this situation exists in this Province, a group of items was specially devised.

The Oral Report. - The first item concerned itself with the oral report, a common form of student activity. The item follows.

Item 1.- "Did the students present oral reports on topics to the class? Yes. No."

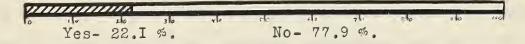


Fig. 28. - Oral Reports by Students.

The great majority of the students did not answer this item, possibly because they misunderstood it. It seems more probable that they had never heard of student reports in History. Of the students who did answer the item, 22.1%



admitted to having given such reports, and 77.9% claimed that they had not reported to the class on a single topic. This seems a serious situation, and suggests that in the majority of the schools, the teacher presented all the material.

The Student Activity Period. The next detail of the investigation approached this problem from another angle.

Item 2.- "Were there occasions when student reports and class

A more satisfactory result was secured. 34.5% of the students admitted that they had attended such periods, while 65.5% had not. The percentage is low, though an improvement over the oral report situation.

Class Discussion. - A more general item was then inserted on the problem of the freedom given the students to
enter into class discussion with the teacher or with their
classmates.

Item 3 .- "Was discussion in class encouraged? Yes. No."



Fig. 29. - Encouragement of Class Discussion.

Here the results were quite satisfactory. As shown in the graph, 75% of the students admitted that they were encouraged to discuss the material presented, and only 25% contended that discussion was frowned upon.

The conclusion which suggests itself is that the teachers do not discourage student activity. However, they appear to lack variety in the procedures which might stimulate

it.



The next item asked for a list of the forms of student activity sponsored by the teacher. There was a disappointing similarity in the answers which were received. The following devices were submitted:

- 1. The asking of questions.
- 2. Debates.
- 3. Written compositions on historical topics.
- 4. Writing of summaries on the blackboard.
- 5. Discussion.
- 6. Historical games.
- 7. Writing answers to problem questions.

One can readily see that many of these are ordinary assignments, with the profitable occupation of seat work or home work time in mind. They suggest that little systematic attempt to make the students share the activity of the History recitation period is being made.

An excellent study might be made of the problem of introducing more student activity into the History period.

Suffice it to say that much of the good which a course in History should yield to the student must come from playing an active part in the class period, rather than the traditional passive role.

3. Individual Differences.

The Teacher's Attitude Towards Clever and Weak Students.The problem of the teacher's attitude towards the clever student,
and the weaker student is an interesting one. Does the teacher
single out any group of students for special attention? Are



certain groups of students consistently neglected? The items which follow shed some light upon this problem.

Item 1.- "Were the poorer students concentrated upon by the teacher? Yes. No."

Item 2 .- "Were they apparently neglected? Yes. No."

Item 3.- "Were the cleverer students concentrated upon by the teacher? Yes. No."

Item 4 .- "Were they apparently neglected? Yes. No."

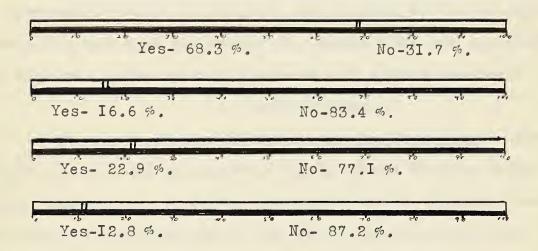
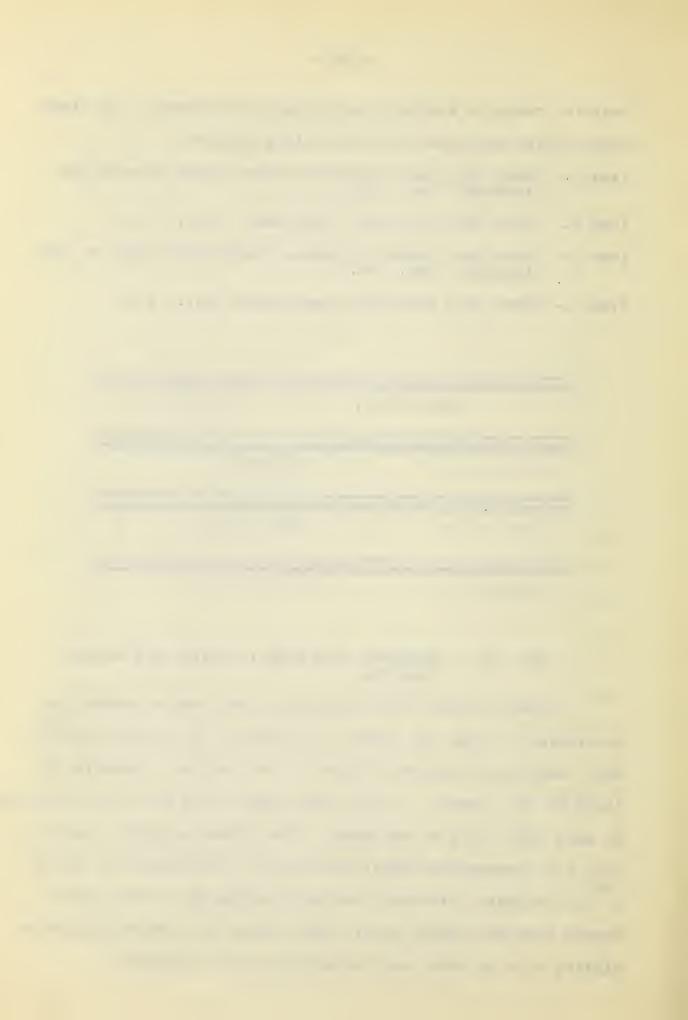


Fig. 30. - Teachers' Attitude to Clever and Poorer Students.

Here we have very interesting, and rather unexpected conclusions, which can hardly be avoided. The poorer students were obviously concentrated upon by the teacher, according to 68.3% of the answers. On the other hand, they were not neglected, in more than 16.6% of the cases. The clever students, however, were not concentrated upon, according to the verdict of 77.1% of the students, although they were neglected to even less a degree than the poorer ones. This raises the interesting speculation - is it ever easy to neglect clever students?



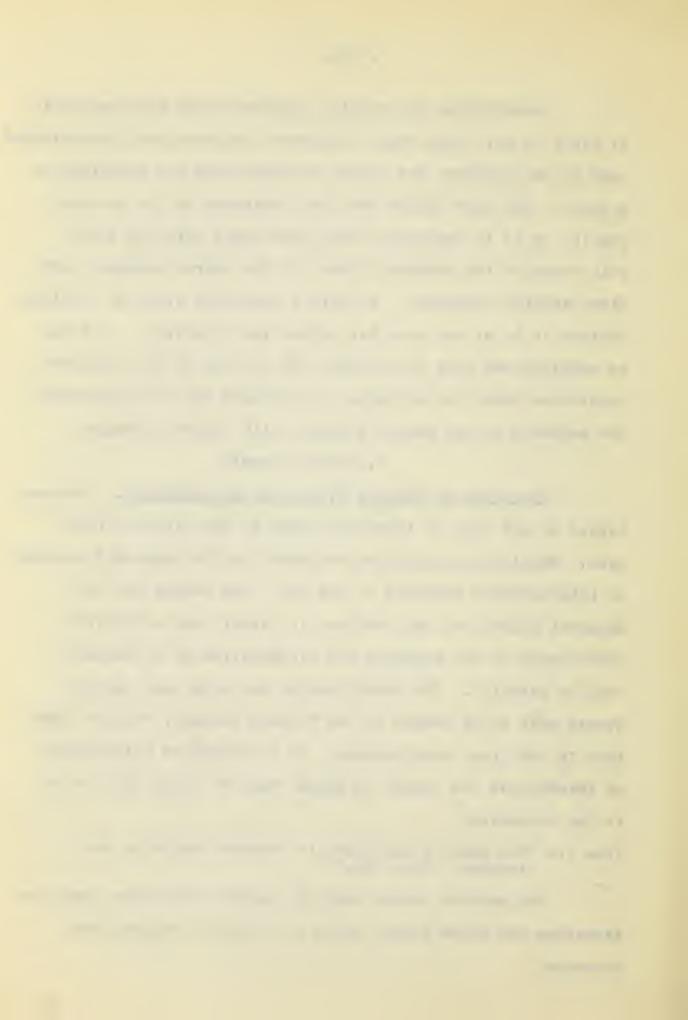
Interpreting the results depicted above more generally, it might be said that while the poorer students were concentrated upon by the teacher, the clever students were not conscious of neglect. One must differ from the testimony of the cleverer pupils, as it is impossible that they could have had their fair share of the teacher's time, if the poorer students were given special treatment. Is this a desirable state of affairs? Whether it is or not does not affect the situation. As long as examinations must be written, and as long as the teacher's reputation rests on the number of students who are successful, the emphasis on the poorer students will remain unchanged.

4. Current Events.

The Place of Current Events in the Classroom.— Current Events do not hold an important place in the History class-room. Examination questions are never set on important national or international problems of the day. The reason for the apparent neglect of this subject is largely the difficulty experienced in the securing and distribution of a standard body of material. The understanding has been that Current Events were to be taught by the History teacher, but not examined in the final examinations. It is therefore interesting to investigate the extent to which they are being dealt with in the classroom.

Item 1.- "Was there instruction in Current Events by the teacher? Yes. No."

The answers reveal that in 41.9% of the cases, such instruction had taken place, while in 58.1% no teaching had occurred.



There remained the possibility that the teacher might have arranged for student reports in Current Events. In that case the subject might have been covered, without the fact revealing itself in the answers to the item above.

Item 2.- "Did the class study Current Events topics and report on them during class periods? Yes. No."

24.7% of the students did present such reports, and 75.3% did not.

The inevitable conclusion from these facts must be that the study of Current Events is being neglected in Alberta. This is far from being a satisfactory situation. It is probably accounted for in two ways. First, the Department does not insist on the teaching of the subject. Secondly, the teachers, realizing that their students will not be examined on the subject, deliberately leave it out of their plans, feeling that all their time and energy will be required in covering the material which will constitute the final examination. Here we have another evidence of the sinister influence of the examination system upon teaching.

The Provision for Reading in Current Events. - An interesting sidelight on the problem of Current Events was investigated in the following item.

Item 3.- "How many periodicals or magazines providing reading in Current Events were available in the classroom or school?"



The information secured is displayed below.

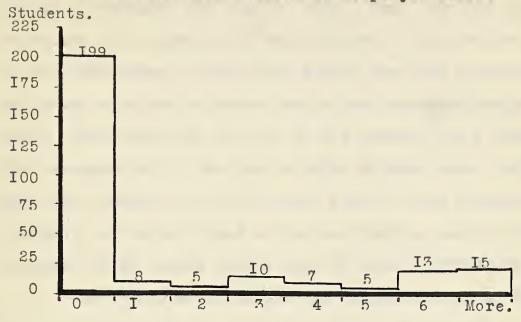


Fig. 31. - Number of Current Events Periodicals
Available in School.

This histogram seems to convey convincingly the fact that in the majority of cases, no material in Current Events, which the students could have access to, was available in classroom or school. In precisely 75.1% of the cases there were no journals nor periodicals of this variety available for study by the students whether in class, or after hours.

This information corresponds with the findings of the previous items. It re-emphasizes the statement that Current Events are being neglected in this Province. Only a few teachers are attempting to teach such material, provide periodicals for reference, or even to stimulate interest in it. Only Departmental action can remedy this situation.

5. Teachers' and Pupils' Aids.

The Use of Teachers' and Pupils' Aids .- In this Province there has been a mushroom growth of a strange variety of publi-



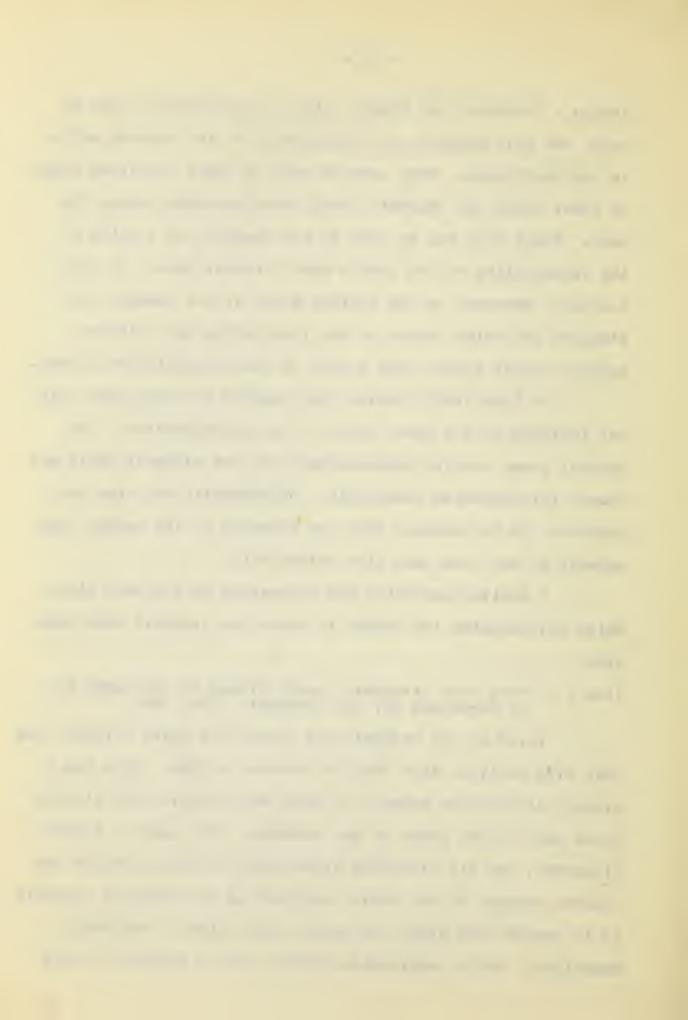
cation - Teachers' and Pupils' Aids. They take the form of brief and arid synopses of the material of the various units on the curriculum. They contain only the most important facts or ideas which the students should have mastered during the year. These aids may be used by the teacher, as a guide in the organization of the year's work, without harm. If they are used, however, as the lecture notes of the teacher, the students are being robbed of the interesting and colorful material which should form a part of each presentation lesson.

An item, asking whether the teacher had used such aids, was included in the final draft of the questionnaire. The control group results demonstrated that the students could not answer this question accurately. Consequently the item was deleted. It is probable that the teachers of the larger high schools do not use such aids extensively.

A healthy condition was discovered by the next item, which investigated the extent to which the students used such aids.

Item 2.- "Were they (students' aids) placed in the hands of, or purchased by, the students? Yes. No."

94.2% of the students had never used these devices, and only 5.8% admitted that they had access to them. This was a highly satisfactory answer, as much harm results from placing these aids in the hands of the students. The text is usually discarded, and all attention transferred to the colorless and tedious summary of dry facts contained in the prepared synopsis. It is conned over again and again, until almost completely memorized. While examination results can be secured in this



fashion, the student's attitude towards the subject suffers greatly, and little educational growth results.



CHAPTER XII

SUMMARY

The investigation into methods of teaching History in the larger secondary schools of Alberta, which has formed the topic of discussion in the preceding chapters, has resulted in several significant discoveries or conclusions. The most important findings are stated briefly below.

- 1. The ordinary class in History is entirely too large for satisfactory work. The average class consists of 39.33 students. The most desirable techniques of teaching cannot be employed regularly in such a large class.
- 2. The actual teaching time of the ordinary History period is smaller than might have been expected. 50.21% of the time is spent in teaching, on the average. The construction of notes, mainly by the teacher, has caused this decrease in teaching time.
- 3. The use of the blackboard outline is not as common as might be desired. 35.44% of the students insisted that their teachers had not employed this device.
- 4. Too great attention is being paid to the construction of the History note book. 87.29% of the students stated that their note books contained 80% or more of the year's work in History.
- 5. The teacher seems to take too great a responsibility in the construction of the student's note book. 54.26% of the students claim that the teacher dictated 60% or more of their



notes.

- 6. The practice of "cramming" is surprisingly common.
 56.6% of the students admitted that they relied on this method of study.
- 7. The students view the term examinations with gratifying seriousness. 70.3% asserted that they had studied for them vigorously.
- 8. The teachers of History have not accepted the class devoted exclusively to review as a regular procedure, to the degree which might be desired. Some 39.96% of the students had not taken part in review classes of this type.
- 9. The questions asked by the teachers in reviewing were well planned. 73.7% of the answers indicate that the questions asked were usually of the type requiring organized material or reasoned judgments from the students.
- 10. The final review period is usually of a suitable length. The answers suggest that the review interval varies from one to eight weeks. 41.7% of the students state that the review period was between three and four weeks in length.
- 11. Much emphasis is placed on the answering of old examination questions, as a device in review. 89% of the students admit that they were trained for examination in this fashion.
- 12. The essay appears to have fallen into disuse in great degree. 64.8% of the students did not write a single essay during the entire year.
- 13. The study assignment seems to be in popular use.

 It is of doubtful value, as 31.4% of the students state frankly



that they did not execute it.

- 14. Very few maps are being made in History, probably due to the fact that the outline map has not entered into its rightful place in the devices of the teachers.
- 15. Graphical devices, including charts, graphs and diagrams, are not being used to any extent.
- 16. The material presented by the teacher in class is frequently limited in nature. 43.1% of the students contend that the teacher used only material taken from the text.
- 17. The text was not studied carefully by 28.4% of the students who answered the questionnaire.
- 18. Little reading is done outside the text. 78.9% of the students stated that they had not read a single additional work in History.
- 19. The objective examination has not become a popular device even in the informal examinations of the teacher.
- 20. In the field of the various forms of student activity, few students were required to make oral reports to the class, some 77.9% not making any. Discussion, however, appears to be encouraged.
- 21. The superior student is somewhat neglected in favor of the poorer ones. This conclusion is suggested by 68.3% of the students who answered the item.
- 22. Little attention is paid to the subject of Current Events. Some 58.1% of the answered questionnaires recorded no instruction in this part of the year's work.
- 23. Students' Aids are not in common use. 94.2% of the students testify that they did not use them.



